



**IDEAL INDIAN SCHOOL, DOHA-QATAR**  
**PRE BOARD 1 EXAMINATION, DECEMBER 2023**  
**INFORMATICS PRACTICES (065)**  
**SET 1**

Class : XII  
Date : 12/12/2023

Max. Marks: 70  
Duration: 3 hours

**General Instructions:**

1. This question paper contains five sections, Section A to E.
2. All questions are compulsory.
3. Section A have 18 questions carrying 01 mark each.
4. Section B has 07 Very Short Answer type questions carrying 02 marks each.
5. Section C has 05 Short Answer type questions carrying 03 marks each.
6. Section D has 03 Long Answer type questions carrying 05 marks each.
7. Section E has 02 questions carrying 04 marks each.
8. All programming questions are to be answered using Python Language only.

	<b><u>SECTION – A (Each Question Carries 1 mark)</u></b>	
<b>1</b>	<p>Raj, a Database Administrator, needs to display the average pay of workers from those departments which have more than five employees. He is experiencing a problem while running the following query:</p> <p><b>SELECT DEPT, AVG(SAL) FROM EMP WHERE COUNT(*) &gt; 5 GROUP BY DEPT;</b></p> <p>Which of the following is a correct query to perform the given task?</p> <ol style="list-style-type: none"><li>i. SELECT DEPT, AVG(SAL) GROUP BY DEPT FROM EMP WHERE COUNT(*) &gt; 5;</li><li>ii. SELECT DEPT, AVG(SAL) FROM EMP HAVING COUNT(*) &gt; 5 GROUP BY DEPT;</li><li>iii. SELECT DEPT, AVG(SAL) FROM EMP GROUP BY DEPT WHERE COUNT(*) &gt; 5;</li><li>iv. SELECT DEPT, AVG(SAL) FROM EMP GROUP BY DEPT HAVING COUNT(*) &gt; 5;</li></ol>	<b>1</b>
<b>2</b>	<p>Predict the output of the following query:</p> <p><b>SELECT MOD (9,0);</b></p> <ol style="list-style-type: none"><li>i. 0</li><li>ii. NULL</li><li>iii. NaN</li><li>iv. 9</li></ol>	<b>1</b>
<b>3</b>	<p>Write the output of the following SQL query :</p> <p><b>SELECT LCASE(SUBSTR("Project Management",9,6));</b></p> <ol style="list-style-type: none"><li>(a) Manag</li><li>(b) Manage</li><li>(c) MANAGE</li><li>(d) manage</li></ol>	<b>1</b>

4	<p>Which of the following SQL function returns the number of values in the specified column ignoring the NULL values ?</p> <p>(a) COUNT(*) (b) COUNT(columnname) (c) LENGTH(*) (d) LENGTH(columnname)</p>	1
5	<p>If the substring is not present in a string, the INSTR() returns:</p> <p>i. -1 ii. 1 iii. NULL iv. 0</p>	1
6	<p>Which of the following is the correct output of the following SQL command?</p> <p>SELECT ROUND (7876.4568, 2) ;</p> <p>i. 7876.46 ii. 7876.45 iii. 7876.5 iv. 7900.4568</p>	1
7	<p>A _____ is a network device that can receive the data, analyse it and transmit it to other networks.</p> <p>(a) Modem    (b) Switch    (c) Repeater    (d) Router</p>	1
8	<p>_____ is a service that allows to put a website or a web page on the Internet.</p> <p>(a) Web Server (b) Web Browser (c) Web Hosting (d) Domain Name System</p>	1
9	<p>The _____ is a collection of information stored in the form of hyperlinked web pages and web resources. Example, www.google.com</p> <p>a) World Wide Web (WWW) b) Web c) Both (a) and (b) d) Internet</p>	1
10	<p>The _____ is a system of linked networks that are worldwide in scope and facilitate data communication services such as remote login, file transfer, electronic mail, the World Wide Web and newsgroups.</p> <p>a) World Wide Web (WWW) b) Web c) Both (a) and (b) d) Internet</p>	1

11	<p>What will be the output of the following program ?</p> <pre>import pandas as pd x=6 S1=pd.Series(x,index=[1,2,4,6,8,9]) print(S1)</pre> <p>(A)</p> <pre>1 6 2 6 4 6 6 6 8 6 9 6 dtype: int64</pre> <p>(B)</p> <pre>0 6 dtype: int64</pre> <p>(C)</p> <pre>1 2 4 6 8 9 6 6 6 6 6 6 dtype: int64</pre> <p>(D) None of the above</p>	1
12	<p>Out of the following, which crime(s) will come under cyber crime category ?</p> <p>(A) Identity theft    (B) Invasion of privacy    (C) Online harassment    (D) All of the above</p>	1
13	<p>What will be the output of the Python program ?</p> <pre>import pandas as pd I=['Apple','Banana','Mango','Orange','Litchi'] df=pd.DataFrame(I,index=[1,2,3,4,5]) print(df.iloc[1:3])</pre> <p>a)</p> <pre>0 1 Apple 2 Banana</pre> <p>b)</p> <pre>0 2 Banana 3 Mango</pre> <p>c)</p> <pre>0 1 Apple 2 Banana 3 Mango</pre>	1

	<p>d)</p> <p>0</p> <p>2 Banana</p> <p>3 Mango</p> <p>4 Orange</p>	
14	<p>You were not able to create the IP project, therefore you downloaded a project from the internet and submitted it to your teacher by your name. This wrong/unethical act is considered as _____ .</p> <p>(A) Copyright</p> <p>(B) Hacking</p> <p>(C) Plagiarism</p> <p>(D) Trademark</p>	1
15	<p>We need to exhibit proper manners and etiquettes while being online. Pick up one such net etiquette from the following :</p> <p>(a) Do not share the expertise</p> <p>(b) Respect privacy and diversity</p> <p>(c) Feed the troll</p> <p>(d) Copyright violation</p>	1
16	<p>Ms. Heba Benny created an assistive device for the blind. This device is very helpful for the blind and people with low vision. Now, she wants that no one should copy her innovation. What should she do ?</p> <p>(a) Get the trademark for her invention</p> <p>(b) Get the license for her invention</p> <p>(c) Get the patent for her invention</p> <p>(d) Get the copyright for her invention</p>	1
17	<p>Assertion (A): In order to be able to use Python's data visualization library, we need to import the pyplot module from matplotlib library.</p> <p>Reason (R): The pyplot module houses a variety of functions required to create and customize charts or graphs.</p> <p>i. Both A and R are true and R is the correct explanation for A</p> <p>ii. Both A and R are true and R is not the correct explanation for A</p> <p>iii. A is True but R is False</p> <p>iv. A is false but R is True</p>	1
18	<p>Assertion (A):- To use the Pandas library in a Python program, one must import it.</p> <p>Reasoning (R): - The only alias name that can be used with the Pandas library is pd.</p> <p>i. Both A and R are true and R is the correct explanation for A</p> <p>ii. Both A and R are true and R is not the correct explanation for A</p> <p>iii. A is True but R is False</p> <p>iv. A is false but R is True</p>	1

## SECTION – B (Each Question Carries 2 marks)

19	<p>Answer the following Questions</p> <p>a)</p> <p>Ms. Shahad wants to find the Maximum of commission earned by those departments where the number of employees in the department is more than 2 and writes the following query :</p> <p><b>Select department, Maximum(commission) from TECHNO Where count(*)&gt;2 group by department;</b></p> <p>But he got an error. Identify the error(s) and rewrite the query by underlining the correction(s) done.</p> <p>b)</p> <p>Ms. Farha created the following table STUDENT in her database.</p> <p>Table : STUDENT</p> <table><tr><th>RollNo</th><th>Name</th><th>Class</th><th>Marks</th></tr><tr><td>1</td><td>Ritika</td><td>12</td><td>40</td></tr><tr><td>2</td><td>Angad</td><td>12</td><td>35</td></tr><tr><td>3</td><td>Kaveri</td><td>11</td><td>42</td></tr><tr><td>4</td><td>Lalitha</td><td>12</td><td>21</td></tr><tr><td>5</td><td>Daniel</td><td>11</td><td>44</td></tr><tr><td>6</td><td>Rabindra</td><td>11</td><td>39</td></tr><tr><td>7</td><td>Rabia</td><td>11</td><td>28</td></tr></table> <p>Ms. Farha, a database administrator needs to display Class wise Average Marks of Class 11. She is encountering an error while executing the following query:</p> <p><b>SELECT Class, Average(Marks) FROM STUDENT WHERE Class=11 GROUP BY HOUSE;</b></p> <p>Help her in identifying the reason of the error and write the correct query by suggesting the possible correction (s).</p>	RollNo	Name	Class	Marks	1	Ritika	12	40	2	Angad	12	35	3	Kaveri	11	42	4	Lalitha	12	21	5	Daniel	11	44	6	Rabindra	11	39	7	Rabia	11	28	2
RollNo	Name	Class	Marks																															
1	Ritika	12	40																															
2	Angad	12	35																															
3	Kaveri	11	42																															
4	Lalitha	12	21																															
5	Daniel	11	44																															
6	Rabindra	11	39																															
7	Rabia	11	28																															
20	<p>Give the differences with suitable example queries.</p> <p>a) MOD() and AVG() functions in SQL.</p> <p>b) POWER( ) and SUM( ) SQL functions.</p>	2																																
21	<p>Predict the output of the given Python code:</p> <p>a)</p> <pre>import pandas as pd list1=[1,2,3] ser = pd.Series(list1*2) print(ser) print(ser**3)</pre>	2																																

	<p>b)</p> <pre>import pandas as pd S1=pd.Series(data=[10,70]) S2=pd.Series(S1+S1) print(S2) print(S2*3)</pre>	
22	<p>a)</p> <p>The python code written below has syntactical errors. Rewrite the correct code and underline the corrections made.</p> <pre>Import pandas as pd df ={"Technology":["Programming","Robotics","3D Printing"],       "Time(in months)":[4,4,3]     } df= Pd.dataframe(df) Print(df)</pre> <p>b)</p> <p>Complete the given Python code to get the required output as: Rajasthan</p> <pre>import _____ as pd di = { 'Corbett': 'Uttarakhand',        'Sariska': 'Rajasthan',        'Kanha': 'Madhya Pradesh',        'Gir': 'Gujarat'      } NP = _____. Series( _____ ) print(NP[ _____ ])</pre>	2
23	<p>a) Afnan is doing a course in networking. She is unable to understand the concept of URL. Help her by explaining it with the help of suitable example.</p> <p style="text-align: center;"><b>OR</b></p> <p>b) With reference to browsing the websites, briefly explain the term cookie and its significance .</p>	2
24	<p>a) What do you understand by Intellectual Property Rights ? Why is there a need to protect Intellectual Property Rights ?</p> <p style="text-align: center;"><b>OR</b></p> <p>b) What is the difference between Copyright and Licenses ?</p>	2
25	<p>Answer the following questions</p> <p>a)</p> <p>Write a program in Python to create the series of all the alphabets of “Ideal” with default index. Print the first four alphabets.</p> <p>b)</p> <p>Carefully observe the following code :</p>	2

```
import pandas as pd
product={'prodid':pd.Series([1,2,3,4,5]),
        'pname':pd.Series(['pen','pencil','eraser','color',
                           'sharpener']),
        'qty':pd.Series([2,10,10,30,10]),
        'price':pd.Series([300,20,50,40,15])
        }
stock=pd.DataFrame(product)
print(stock)
```

Write Python statement to display the names of products.

### **SECTION – C (Each Question Carries 3 marks)**

**26** Consider the table Customer given below and write SQL commands :

3

TABLE : Customer

CustID	Name	Country	Emailid	Orderdate
C1001	Rajat	India	rajat@gmail.com	2022-12-22
C1002	Michael	Denmark	mic@yahoo.com	2023-11-15
C1003	Riyo	Thailand	Ri@gmail.com	2022-05-06
C1004	Jennifer	S. Korea	Jen@gmail.com	2022-08-07
C1005	Sudha	India	Sud@abc.com	2023-01-01
C1006	Vivek	Nepal	viv@xyz.com	2023-04-14

- Display the details of all customers who have placed the order in the month of “January”.
- Count the total number of customers from Nepal.
- Display first 3 characters from Name for Gmail users.

**27** Consider the following Table : ITEM :

3

Table : ITEM

ID	INAME	PRICE	QTY	Stockdate
P1001	Sketch Pen	20.50	5	2020-04-21
P1002	Roller Ball Pen	55.00	1	2019-03-18
P1003	Gel Pen	25.10	3	2019-01-10
P1004	Notebook	75.80	1	2020-10-18
P1005	Pencil	NULL	NULL	NULL

Find the output of the following SQL queries :

- SELECT UCASE(RIGHT(INAME, 2)), ROUND(PRICE,0) FROM ITEM;
- SELECT SUM(PRICE\*QTY) AS “TOTAL COST” FROM ITEM  
WHERE INAME IN (‘Roller Ball Pen’, ‘Notebook’);

	<p>c) SELECT INAME FROM ITEM WHERE RIGHT(ID,1)=3 OR MONTH(Stockdate)=3;</p> <p><b>OR (Option for part a, b and c)</b></p> <p>i. SELECT MID(INAME,4,3), INSTR(INAME, "Pen") FROM ITEM WHERE MONTHNAME(Stockdate) IN ("March", "January");</p> <p>ii. SELECT DAY(Stockdate) from ITEM ORDER BY StockDate;</p> <p>iii. SELECT SUM( ROUND(PRICE,0) * QUANTITY) FROM ITEM WHERE ID IN ("P1002" , "P1004");</p>																																																	
28	<p>Answer the following questions</p> <p>a)</p> <p>Create a DataFrame in Python from the given list:</p> <pre>[[‘Divya’,’HR’,95000],[‘Mamta’,’Marketing’,97000],[‘Payal’,’IT’,980000], [‘Deepak’,’Sales’,79000]]</pre> <p>Also give appropriate column headings and indexes as shown below:</p> <table><thead><tr><th></th><th>Name</th><th>Department</th><th>Salary</th></tr></thead><tbody><tr><td>1</td><td>Divya</td><td>HR</td><td>95000</td></tr><tr><td>2</td><td>Mamta</td><td>Marketing</td><td>97000</td></tr><tr><td>3</td><td>Payal</td><td>IT</td><td>980000</td></tr><tr><td>4</td><td>Deepak</td><td>Sales</td><td>79000</td></tr></tbody></table> <p>b)</p> <p>Razan needs to create the following two series named ‘Eng’ and ‘Math’. Help her to create a DataFrame ‘mydata’ from the given series ‘Eng’ and ‘Math’.</p> <table><thead><tr><th colspan="2">Eng</th><th colspan="2">Math</th></tr></thead><tbody><tr><td>Aditi</td><td>25</td><td>Aditi</td><td>9</td></tr><tr><td>bhavuk</td><td>21</td><td>bhavuk</td><td>29</td></tr><tr><td>chirag</td><td>23</td><td>chirag</td><td>15</td></tr><tr><td>deepak</td><td>24</td><td>deepak</td><td>14</td></tr><tr><td>Gaurav</td><td>27</td><td>Gaurav</td><td>20</td></tr><tr><td>dtype:</td><td>int64</td><td>dtype:</td><td>int64</td></tr></tbody></table>		Name	Department	Salary	1	Divya	HR	95000	2	Mamta	Marketing	97000	3	Payal	IT	980000	4	Deepak	Sales	79000	Eng		Math		Aditi	25	Aditi	9	bhavuk	21	bhavuk	29	chirag	23	chirag	15	deepak	24	deepak	14	Gaurav	27	Gaurav	20	dtype:	int64	dtype:	int64	3
	Name	Department	Salary																																															
1	Divya	HR	95000																																															
2	Mamta	Marketing	97000																																															
3	Payal	IT	980000																																															
4	Deepak	Sales	79000																																															
Eng		Math																																																
Aditi	25	Aditi	9																																															
bhavuk	21	bhavuk	29																																															
chirag	23	chirag	15																																															
deepak	24	deepak	14																																															
Gaurav	27	Gaurav	20																																															
dtype:	int64	dtype:	int64																																															
29	<p>Consider the given DataFrame 'result':</p> <table><thead><tr><th></th><th>Name</th><th>Percentile</th></tr></thead><tbody><tr><td>0</td><td>Rohit</td><td>95</td></tr><tr><td>1</td><td>Mohit</td><td>76</td></tr><tr><td>2</td><td>Raman</td><td>98</td></tr><tr><td>3</td><td>Aditya</td><td>47</td></tr></tbody></table>		Name	Percentile	0	Rohit	95	1	Mohit	76	2	Raman	98	3	Aditya	47	3																																	
	Name	Percentile																																																
0	Rohit	95																																																
1	Mohit	76																																																
2	Raman	98																																																
3	Aditya	47																																																



	<p>Write the suitable Python statements for the following :</p> <ol style="list-style-type: none"> <li>Add a new column 'Grade' to the dataframe having values A,B,A,C and display the top 3 rows.</li> <li>Add a new row where Name is 'Arti' with Percentile as 92 and Grade A and rename the column 'Percentile' to 'Percent'.</li> <li>Remove the row containing details of Rohit and remove the column Grade.</li> </ol>	
30	<p>Answer the following questions</p> <ol style="list-style-type: none"> <li>Nowadays children are fond of playing computer games. What is the health hazard that can occur due to excessive use of computer/smart phone screens ?</li> <li>What is IPR ? Why it is needed?</li> <li>What is FOSS. Give examples</li> </ol> <p><b>OR (Option for part a, b and c)</b></p> <p>Ms. Evangline, recently started using her social media account. Within a few days, she befriends many people she knows and some that she does not know. After some time, she starts getting negative comments on her posts. She also finds that her pictures are being shared online without her permission. Based on the given information, answer the questions given below.</p> <ol style="list-style-type: none"> <li>Identify the type of cybercrime she is a victim of. Under which act, she can lodge a complaint to the relevant authorities?</li> <li>Suggest her any two precautionary measures which she should take in future while being online to avoid any such situations.</li> <li>What is Hacking? Write measures that one should take to avoid being the victim of hacking.</li> </ol>	3
<b><u>SECTION – D (Each Question Carries 5 marks)</u></b>		
31	<p>Write the SQL queries which will perform the following operations :</p> <ol style="list-style-type: none"> <li>To convert email id “ ANIKA@GMAIL.com ” to lowercase after removing leading and trailing blank spaces.</li> <li>To display the current year i.e 2023</li> <li>To get the position of the first occurrence of sub-string “zia” in another string “Fouzia Ahmed”.</li> <li>To extract substring of 3 characters starting at 3<sup>rd</sup> position from a given string “Maria John”.</li> <li>Display the remainder of 100 divided by 9.</li> </ol> <p><b>OR (Option for part a, b, c, d and e)</b></p>	5

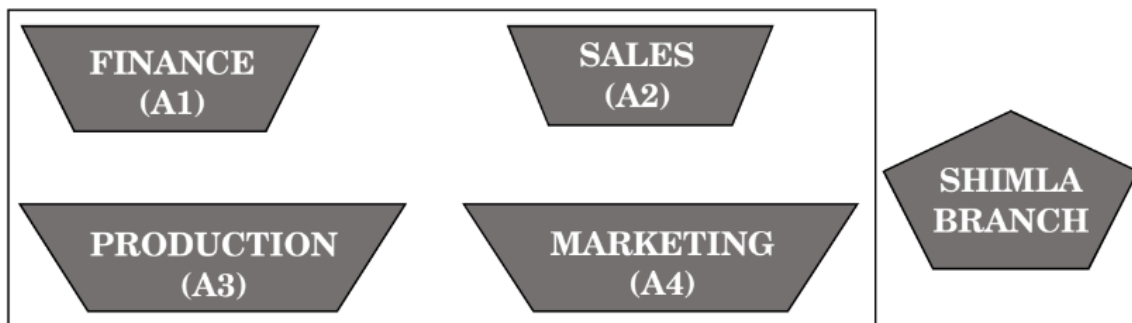
**Table: Exam**

RegNo	Name	Subject	Marks
1	Sanya	Computer Science	98
2	Sanchay	IP	100
3	Vinesh	CS	90
4	Sneha	IP	99
5	Akshita	IP	100

Write MYSQL Queries for the following

- i. Ms. Daniya want to create the above table named exam. Write Mysql Query to create the table Exam assuming suitable data types. Constraint to the table Exam is Primary key for RegNo and NOT NULL for Name column.
- ii.
  - a) Insert a new record in the table having following values: [6,'Zainab','CS',85]
  - b) To display students whose marks greater than 90 and less than 100
- iii.
  - a) To add a new column Grade of suitable datatype.
  - b) To delete column Grade
- iv.
  - a) To change the value “IP” to “Informatics Practices” in subject column.
  - b) To remove the records of those students whose marks are less than 30 .
- v.
  - a) To change the data type of Name to Varchar(30).
  - b) To drop the table Exam

- 32** ABC Private Ltd., Bangalore has different divisions, Finance (A1), Sales (A2), Production (A3) and Marketing (A4). The layout of the Bangalore branch is :



The company also has a branch in Shimla. The management wants to connect all the divisions as well as all the computers of each division (A1, A2, A3, A4).

Distance between the branches are as follows :

A3 to A1	25 m
A1 to A2	40 m
A2 to A4	25 m
A4 to A3	120 m
A3 to A2	990 m
A1 to A4	170 m

The number of computers in each branch is as follows :

A1	50
A2	40
A3	110
A4	60

Based on the above specifications, answer the following questions :

- a)
- (i) Draw the most suitable cable layout for connecting all the divisions of Bangalore branch.
  - (ii) Suggest the most appropriate location of the server inside the Bangalore Branch (out of the four divisions) to get the best connectivity for maximum number of computers.
- b)
- (i) Suggest the kind of network required (out of LAN, MAN, WAN) for connecting Production (A3) with Shimla branch.
  - (ii) Out of LAN, WAN and MAN, what type of network will be formed if we interconnect different computers of Bangalore Division?
- c)
- (i) Which device can be used to connect the network of Bangalore Division to the Internet? This device should be able to receive data, analyse it and then transmit it to the network.
  - (ii) Company is planning to get its website designed which will allow customers to see their results after registering themselves on its server. Out of the static or dynamic, which type of website will you suggest.
- d)
- (i) Suggest the placement of switch/hub.
  - (ii) Suggest the placement of Repeater.
- e)
- i) The company wanted to develop a healthy relation among the employees, therefore the HRA planned an online session with everyone so that they could play games from their devices. Suggest the protocol that helped to send the voice signals over Internet.
  - ii) Which of the following will you suggest to establish the online face to face communication between the people in the ADMIN office of Mumbai campus and Delhi head office?  
a) Cable TV   b) Email   c) Video conferencing   d) Text chat

**33** Answer the following questions

5

a)

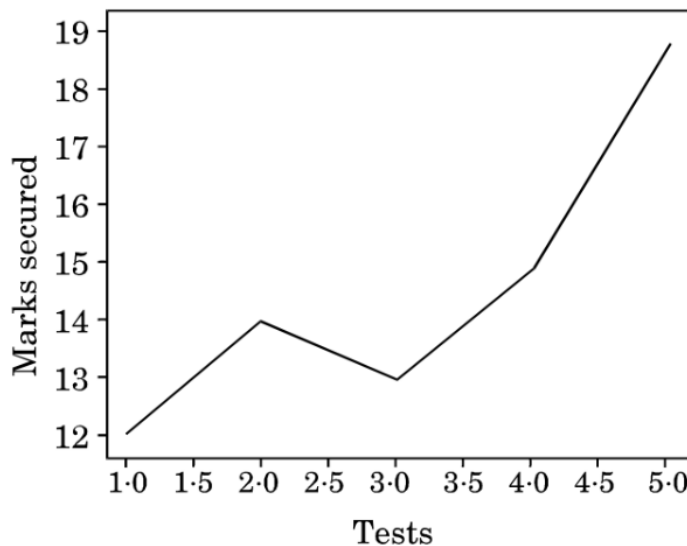
The heights of 10 students of eighth grade are given below:

```
Height_cms=[145,141,142,142,143,144,141,140,143,144]
```

Write suitable Python code to generate a histogram based on the given data, along with an appropriate chart title and both axis labels. Also give suitable python statement to save this chart.

b)

Consider the following graph. Write the code to plot it. Label the X and Y axis.

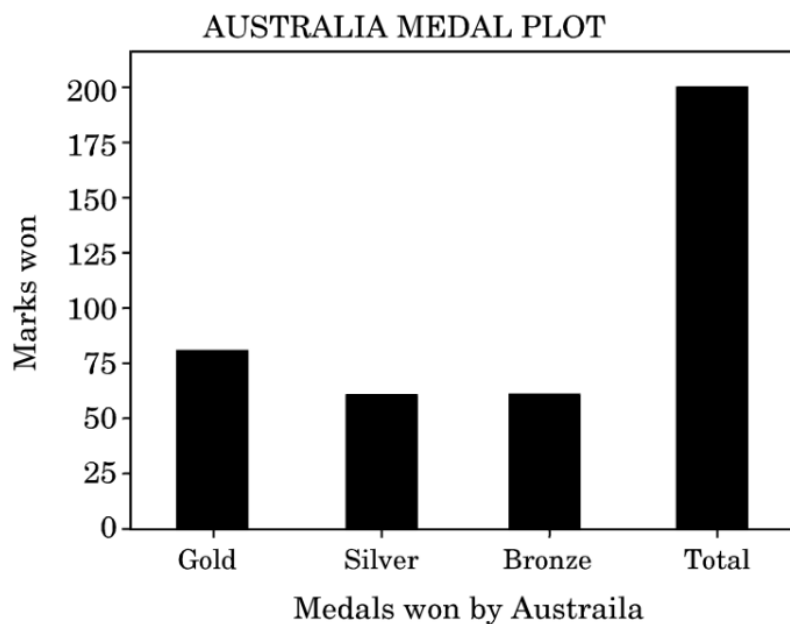


Also give suitable python statement to save this chart as pdf.

**OR (Option for part b only)**

c)

Write code to draw the following bar graph representing the total number of medals won by Australia. Label the X and Y axis. Also give suitable python statement to save this chart as pdf.



### SECTION – E (Each Question Carries 4 marks)

**34** Answer the following Questions

4

**Note :** Questions i, ii and iii are based on table CARSALE,  
Questions iv and v based on table TRANSACTION

Based on the SQL table CARSALE, write suitable queries for the following:

NUMBER	SEGMENT	FUEL	QT1	QT2
1	Compact HatchBack	Petrol	56000	70000
2	Compact HatchBack	Diesel	34000	40000
3	MUV	Petrol	33000	35000
4	MUV	Diesel	14000	15000
5	SUV	Petrol	27000	54000
6	SUV	Diesel	18000	30000
7	Sedan	Petrol	8000	10000
8	Sedan	Diesel	1000	5000

Note:

QT1 : First Quarter

QT2 : Second Quarter

- Display the segment wise count of car sales and average sales in the first quarter for MUV and SUV segments.
- Display fuel wise Total sales in the Second quarter.
- Display Maximum and minimum sales in first quarter for Petrol vehicles.

Ms. Elaf manages database in a blockchain start-up. For business purposes, she created a table named TRANSACTION. Assist her by writing the following queries:

TABLE: TRANSACTION

id	user	value	hash	transaction_date
1	Steve	900	ERTYU	2020-09-19
2	Meesha	145	@345r	2021-03-23
3	Nimisha	567	#wert5	2020-05-06
4	Pihu	678	%rtyu	2022-07-13
5	Kopal	768	rrt4%	2021-05-15
7	Palakshi	534	wer@3	2022-11-29

	<div><div>iv. Write a query to display the name of the month (Ex: January, February etc.) of oldest transaction.</div><div>OR (Option for part iv only)</div><div>v. Write a query to display the name of day (ex: Sunday, Monday etc.) of the most recent transaction.</div></div>																									
35	<div>Consider DataFrame : “population”</div> <table><tr><td></td><td>country</td><td>population</td><td>percent</td></tr><tr><td>IT</td><td>Italy</td><td>61</td><td>0.83</td></tr><tr><td>ES</td><td>Spain</td><td>46</td><td>0.63</td></tr><tr><td>GR</td><td>Greece</td><td>11</td><td>0.15</td></tr><tr><td>FR</td><td>France</td><td>65</td><td>0.88</td></tr><tr><td>PO</td><td>Portugal</td><td>10</td><td>0.14</td></tr></table> <div>Write a program in Python Pandas</div> <div>a) To create the DataFrame “population” from a Dictionary and display the columns country and population.</div> <div>b) To display all the rows where population is more than 50 and display the details of the population in the reverse order of their indexes.</div> <div>c) To display the new population i.e., population increased by 20 for all countries and Write Python statement to export the DataFrame to a CSV file named data.csv stored at D: drive.</div> <div>d) To display the country and population of all countries whose population is less than 50.</div>		country	population	percent	IT	Italy	61	0.83	ES	Spain	46	0.63	GR	Greece	11	0.15	FR	France	65	0.88	PO	Portugal	10	0.14	4
	country	population	percent																							
IT	Italy	61	0.83																							
ES	Spain	46	0.63																							
GR	Greece	11	0.15																							
FR	France	65	0.88																							
PO	Portugal	10	0.14																							

\*\*\*\*\*