

## IDEA OF PROGRAM EFFICIENCY

### ASSIGNMENTS

- Q.1 What is idea of efficiency in regards of program.
- Q.2 Comment on the efficiency of linear and binary search in relation to no of element in list.
- Q.3 What factors does the efficiency depend upon?
- Q.4 How we can relate efficiency with algorithm>
- Q.5 What is algorithm analysis?
- Q.6 How do you check the efficiency of a python program?
- Q.7 Which is faster linear or binary search?
- Q.8 On what factor quality of an algorithm is judged?
- Q.9 What is algorithm analysis?
- Q.10 Define efficiency of a program.
- Q.11 Write two different program for same problem and check which require less time for execution
- Q.12 The algorithm developed by the first programmer for factorial looks like this:
- ```
def fact(n):  
    product = 1  
    for i in range(n):  
        product = product * (i+1)  
    return product  
  
print (fact(5))
```

Similarly, the second programmer also developed an algorithm that looks like this

```
def fact2(n):  
    if n == 0:  
        return 1  
    else:  
        return n * fact2(n-1)
```

```
print (fact2(5))
```

Suppose you are manager and you have to decide which algorithm to use.