1.---------

int a = 0, b = 0;

for (i = 0; i < N; i++) {a = a + rand();}

for (j = 0; j < M; j++) {b = b + rand();}

Time Complexity: Order of n

2.\_\_\_\_\_\_\_\_\_

int a = 0;

for (i = 0; i < N; i++) {for (j = N; j > i; j--) {a = a + i + j;}}

Time Complexity: Order of n^2

3.\_\_\_\_\_\_\_\_\_

int i, j, k = 0;

for (i = n / 2; i <= n; i++) {for (j = 2; j <= n; j = j \* 2) {k = k + n / 2;}}

Time Complexity: Order of n\*log(n)

4.\_\_\_\_\_\_\_\_\_\_

int a = 0, i = N;

while (i > 0) {a += i; i /= 2;}

Time Complexity: Order of log2(n)

5.\_\_\_\_\_\_\_\_\_\_\_\_\_

for(var i=0;i<n;i++)

i\*=k

Time Complexity: Order of logk(n)

6.\_\_\_\_\_\_\_\_\_

def fun(n):

if (n < 5):

print("GeeksforGeeks", end ="")

else:

for i in range(n):

print(i, end= " ")

Time Complexity: Order of n

7.\_\_\_\_\_\_\_\_\_\_

def fun(a, b):

while (a != b):

if (a > b):

a = a – b

else:

b = b – a

Time Complexity: Order of 1

8.\_\_\_\_\_\_\_\_\_\_

void fun(int n)

{for(int i=0;i\*i<n;i++)

cout<<"GeeksforGeeks";}

Time Complexity: Order of log(n)

9.\_\_\_\_\_\_\_\_\_\_\_

void fun(int n){

for (int i = 0; i < n / 2; i++)

for (int j = 1; j + n / 2 <= n; j++)

for (int k = 1; k <= n; k = k \* 2)

cout << "GeeksforGeeks";}

Time Complexity: Order of n^3

10.\_\_\_\_\_\_\_\_\_\_\_\_\_

void fun(int n)

{

int i = 1;

while (i < n) {

int j = n;

while (j > 0) {

j = j / 2;}

i = i \* 2;

}

}

Time Complexity: Order of (log(n))^2