

Assignment - 1

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```

1) void function (int n)
{
    int i, j, k, count = 0;

    for (i = n/2; i <= n; i++)
    {
        for (j = 1; j + n/2 <= n; j++)
        {
            for (k = 1; k <= n; k *= 2)
            {
                count++;
            }
        }
    }
}

```

1
 $n/2$
 $n/2$
 $\log_2 n$
 $n^2 \log_2 n$

```

2) void function (int n)
{
    if (n == 1)
    {
        return;
    }
    for (int i = 1; i <= n; i++)
    {
        for (int j = 1; j <= n; j++)
        {
            printf("*");
            break;
        }
    }
}

```

1
 n
 1
 n

3) void function (int n)

{

int i, count = 0;

for (i = 1; i * i ≤ n; i++)

{

count ++;

}

}

 \sqrt{n}
 \sqrt{n}

4) function (int n)

{

for (int i = 1; i ≤ n; i++)

{

for (int j = 1; j ≤ n; j *= 2)

{

printf ("*");

}

}

}

 n
 $\log_2(n)$
 $n \log_2(n)$

5) function (int n)

{

for (int i = 1; i ≤ $n^{1/3}$; i++)

{

for (int j = 1; j ≤ n; j += 4)

{

printf ("*");

}

}

}

 $n^{1/3}$
 $n/4$
 n^2

6) function (int n)

{

int sum = 0;

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

n

{

if (i > j)

{

sum += 1;

}

else

{

for (int k = 0; k < n; k++)

n

{

sum = sum - 1;

}

n²

}

}

}