1. Problem statement

What are the number of operations for the following function?

public static void func(int n)

{

int sum=0;

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

sum+=i;

System.out.println(sum);

}

1. k1+k2(n)
2. k1+k2
3. k1+k2(n^2)
4. k1+k2(logn)
5. Problem statement

What are the number of operations for the following function?

public static void func(int n)

{

int sum=0;

for(int i=1;i<n\*n;i++)

sum+=i;

System.out.println(sum);

}

1. k1+k2(n)
2. k1+k2
3. k1+k2(n^2)
4. k1+k2(logn)
5. Problem statement

What will be the Time Complexity of following code in terms of ‘n’?

public static void func(int n)

{

int sum=0;

for(int i=1;i<n;i++)

{

for(;i<n\*n;i++)

{

sum+=i;

}

}

System.out.println(sum);

}

* 1. O(n)
  2. O(n^2)
  3. O(n^3)
  4. O(n^4)

1. Problem statement

What will be the Time Complexity of following code in terms of ‘n’?

public static void func(int n)

{

int sum=0;

for(int i=1;i<n;i++)

{

for(int j=1;j<n\*n;j++)

{

sum+=i;

}

}

System.out.println(sum);

}

* 1. O(n)
  2. O(n^2)
  3. O(n^3)
  4. O(n^4)

1. Problem statement

What will be the Time Complexity of following code in terms of ‘n’?

public static void func(int n)

{

int sum=0;

for(int i=1;i<n;i++)

{

for(int j=1;j<=i;j++)

{

sum+=i;

}

}

System.out.println(sum);

}

1. O(n)
2. O(n^2)
3. O(n^3)
4. O(nlogn)
5. Problem statement

What will be the Time Complexity of following code in terms of ‘n’?

public static void func(int n)

{

int sum=0;

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

{

sum+=i;

}

System.out.println(sum);

}

1. O(log n(base 2))
2. O(n)
3. O(ln(n))
4. O(n^2)
5. What is the time complexity for merging two sorted arrays? Size of arrays are n and m.
   * 1. O(n\*m)
     2. O(n+m)
     3. O(n)
     4. O(m)