CSC340: HW5

Problem: Please analyze the time complexity of the following functions or for-loops. For each question, use the following template to figure out the total time needed to finish the corresponding function or for-loop.

Line No.	Time taken to run this line of code once.	Total number of times needed to run this line.
1		
…		
…		
Total time needed to finish this function or loop:		

Submission: Please submit your solution as one PDF file. This PDF will contain three tables in the above format, corresponding to your complexity analysis to the three questions. .

Q1.

```
double sum_skip7 (double array[], int n)
//n: size of the array. Assume n is divisible by 7, i.e., n=7*k, where k is a
    positive integer
 {
     double sum=0;
     for (int i=0; i<n; i=i+7)
              sum = sum + array[ i ];
   return sum;
 }
```

Q2.

```
 double  sum_exponentials(int n)
//n is a power of 5, i.e., n=5^k or  k=log_3 n, where k is a positive integer
 {
        int sum=0;
        for  (int  i=1;  i<n;  i=i*5)
                    sum  =  sum  +  i;
      return  sum;
  }
```

Q3.

```
  for (int i=0; i<n; i++)
       for (int j=i;  j<=n; j++)
                  cout << i  << "," << j <<endl;
```