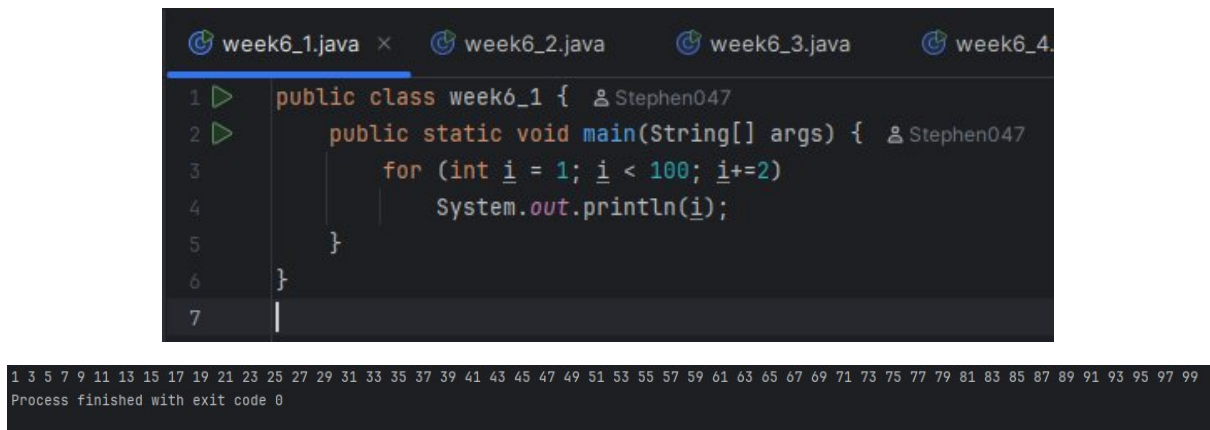


WEEK 6

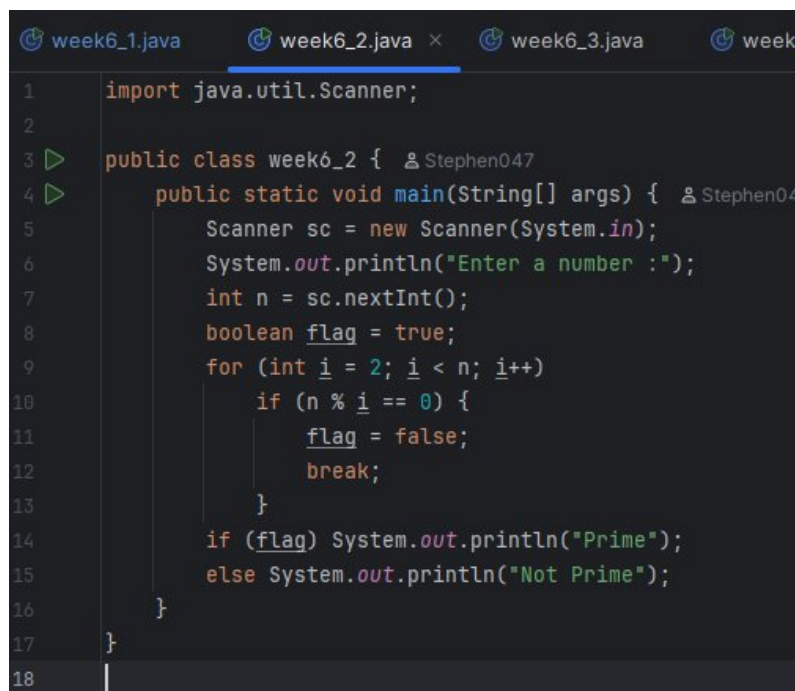
1. Write a Java program to print the odd numbers from 1 to 99.



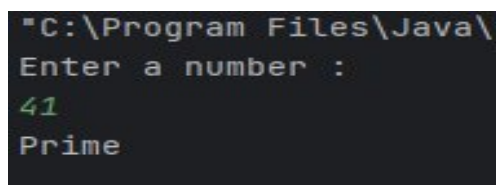
```
week6_1.java x week6_2.java week6_3.java week6_4.java
1 public class week6_1 { Stephen047
2     public static void main(String[] args) { Stephen047
3         for (int i = 1; i < 100; i+=2)
4             System.out.println(i);
5     }
6 }
7 |
```

1 3 5 7 9 11 13 15 17 19 21 23 25 27 29 31 33 35 37 39 41 43 45 47 49 51 53 55 57 59 61 63 65 67 69 71 73 75 77 79 81 83 85 87 89 91 93 95 97 99
Process finished with exit code 0

2. Write a Java program to check whether a number is prime or not.



```
week6_1.java week6_2.java x week6_3.java week
1 import java.util.Scanner;
2
3 public class week6_2 { Stephen047
4     public static void main(String[] args) { Stephen047
5         Scanner sc = new Scanner(System.in);
6         System.out.println("Enter a number :");
7         int n = sc.nextInt();
8         boolean flag = true;
9         for (int i = 2; i < n; i++)
10             if (n % i == 0) {
11                 flag = false;
12                 break;
13             }
14         if (flag) System.out.println("Prime");
15         else System.out.println("Not Prime");
16     }
17 }
18 |
```



```
"C:\Program Files\Java\
Enter a number :
41
Prime
```

3. Write a Java program to swap the first and last elements of an array.

WEEK 6

```
week6_1.java  week6_2.java  week6_3.java  week6_4.java
1  import java.util.Scanner;
2
3  public class week6_3 {  Stephen047
4  public static void main(String[] args) {  Stephen047
5      Scanner sc = new Scanner(System.in);
6      System.out.println("Enter length of Array :");
7      int l = sc.nextInt();
8      int[] arr = new int[l];
9      System.out.println("Enter the elements :");
10     for(int i=0;i<l;i++) arr[i] = sc.nextInt();
11     System.out.println("Current Array :");
12     for(int i=0;i<l;i++) System.out.print(arr[i]+" ");
13     System.out.println();
14     int temp = arr[l - 1];
15     arr[l - 1] = arr[0];
16     arr[0] = temp;
17     System.out.println("After swap :");
18     for(int i=0;i<l;i++) System.out.print(arr[i]+" ");
19 }
20 }
21
```

```
Enter length of Array :
5
Enter the elements :
1 2 3 4 5
Current Array :
1, 2, 3, 4, 5,
After swap :
5, 2, 3, 4, 1,
Process finished with exit code 0
```

4. Write a Java program to find the maximum and minimum among array elements.

```
week6_1.java  week6_2.java  week6_3.java  week6_4.java
1  import java.util.Scanner;
2
3  public class week6_4 {  Stephen047
4  public static void main(String[] args) {  Stephen047
5      Scanner sc = new Scanner(System.in);
6      System.out.println("Enter length of Array :");
7      int l = sc.nextInt();
8      int[] arr = new int[l];
9      System.out.println("Enter the elements :");
10     int max=0, min=0;
11     for(int i=0;i<l;i++) {
12         arr[i] = sc.nextInt();
13         if(i==0) {
14             max = arr[i];
15             min = arr[i];
16         }
17         if(arr[i] > max) max = arr[i];
18         if(arr[i] < min) min = arr[i];
19     }
20     System.out.println("Biggest element = "+max);
21     System.out.println("Smallest element = "+min);
22 }
23 }
```

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```
Enter length of Array :  
5  
Enter the elements :  
21 54 67 98 21  
Biggest element = 98  
Smallest element = 21
```

5. Write a Java program to print all prime numbers between 0 to 100.

```
week6_1.java  week6_2.java  week6_3.java  week6_4.java  week6_5.java  
1  public class week6_5 {  Stephen047 *  
2      public static void main(String[] args) {  Stephen047 *  
3          Outer : for (int i=0; i<=100; i++){  
4              if (i == 0 || i == 1) continue;  
5              for (int j=2; j<i; j++) if (i%j == 0) continue Outer;  
6              System.out.print(i+" ");  
7          }  
8      }  
9  }  
10
```

```
C:\Program Files\Java\jdk-17\bin\java.exe - javaagent:C:\Program Files\Java\jdk-17\bin\java.exe  
2 3 5 7 11 13 17 19 23 29 31 37 41 43 47 53 59 61 67 71 73 79 83 89 97  
Process finished with exit code 0
```

6. Write a Java program to implement linear search.

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```
week6_1.java  week6_2.java  week6_3.java  week6_4.java
1  import java.util.Scanner;
2
3  public class week6_6 {
4      public static void main(String[] args) {
5          Scanner sc = new Scanner(System.in);
6          System.out.println("Enter length of Array :");
7          int l = sc.nextInt();
8          int[] arr = new int[l];
9          System.out.println("Enter the elements :");
10         for(int i=0; i<l; i++) arr[i] = sc.nextInt();
11         System.out.println("Enter target :");
12         int x = sc.nextInt();
13         boolean flag = false;
14         int i;
15         for(i=0; i<l; i++){
16             if (x == arr[i]){
17                 flag = true;
18                 break;
19             }
20         }
21         if (flag) System.out.println("Found at index "+i);
22         else System.out.println("Not found");
23     }
}
```

```
Enter length of Array :
5
Enter the elements :
5 6 4 9 10
Enter target :
9
Found at index 3
```

7. Write a Java program to print all prime numbers between 0 to 100.

```
week6_6.java  week6_7.java  week6_8.java  week6_9.java  week6_
1  public class week6_7 {
2      public static void main(String[] args) {
3          Outer : for (int i=0; i<=100; i++){
4              if (i == 0 || i == 1) continue;
5              for (int j=2; j<i; j++) if (i%j == 0) continue Outer;
6              System.out.print(i+" ");
7          }
8      }
9  }
10 }
```

```
"C:\Program Files\Java\jdk-17\bin\java.exe" "-javaagent:C:\Program Files\
2 3 5 7 11 13 17 19 23 29 31 37 41 43 47 53 59 61 67 71 73 79 83 89 97
Process finished with exit code 0
```

WEEK 6

8. Write a Java program to find the second largest element in an array.

```
week6_6.java  week6_7.java  week6_8.java ×  week6_9.js
1  import java.util.Scanner;
2
3  public class week6_8 {  Stephen047
4      public static void main(String[] args) {  Stephen047
5          Scanner sc = new Scanner(System.in);
6          System.out.println("Enter length of Array :");
7          int l = sc.nextInt();
8          int[] arr = new int[l];
9          System.out.println("Enter the elements :");
10         int maxi = 0;
11         for(int i=0;i<l;i++) {
12             arr[i] = sc.nextInt();
13             if(arr[i] > arr[maxi]) maxi = i;
14         }
15         int m2 = arr[0];
16         for(int i=0;i<l;i++) {
17             if(i == maxi) continue;
18             if(arr[i] > m2) m2 = arr[i];
19         }
20         System.out.println("2nd Biggest : "+m2);
21     }
22 }
23
```

```
"C:\Program Files\Java\jdk-17\bin\java.exe" "-j
Enter length of Array :
5
Enter the elements :
21 48 56 19 18
2nd Biggest : 48
```

9. Write a program to implement Fibonacci series up to N terms.

WEEK 6

```
week6_6.java  week6_7.java  week6_8.java  week6_9.java  ×  week
1  import java.util.Scanner;
2
3  public class week6_9 {  Stephen047
4      public static void main(String[] args) {  Stephen047
5          Scanner sc = new Scanner(System.in);
6          System.out.println("Enter N :");
7          int n = sc.nextInt();
8          if (n >= 1) System.out.print("0 ");
9          if (n >= 2) System.out.print("1 ");
10         if (n >= 3){
11             int a = 0, b = 1;
12             int c;
13             for (int i = 2; i <= n; i++){
14                 c = a+b;
15                 a = b;
16                 b = c;
17                 System.out.print(c+" ");
18             }
19         }
20     }
21 }
```

```
Enter N :
10
0 1 1 2 3 5 8 13 21 34 55
Process finished with exit code 0
```

10. Write a Java program to reverse all elements of an array.

```
Enter length of Array :
5
Enter the elements :
1 2 3 4 5
Current Array :
1, 2, 3, 4, 5,
Current Array :
5, 4, 3, 2, 1,
Process finished with exit code 0
```


WEEK 6

```
week6_6.java week6_7.java week6_8.java week6_9.java week6_10.java
1 import java.util.Scanner;
2
3 public class week6_10 {
4     public static void main(String[] args) {
5         Scanner sc = new Scanner(System.in);
6         System.out.println("Enter Length of Array :");
7         int l = sc.nextInt();
8         int[] arr = new int[l];
9         System.out.println("Enter the elements :");
10        for(int i=0; i<l; i++) arr[i] = sc.nextInt();
11        System.out.println("Current Array :");
12        for(int i=0; i<l; i++) System.out.print(arr[i]+" ");
13        System.out.println();
14        for (int i=0; i<l/2; i++){
15            int temp = arr[i];
16            arr[i] = arr[l-1-i];
17            arr[l-1-i] = temp;
18        }
19        System.out.println("Current Array :");
20        for(int i=0; i<l; i++) System.out.print(arr[i]+" ");
21    }
22 }
```

11. Write a Java program to find the frequency of each character in a given string.

```
week6_6.java week6_7.java week6_8.java week6_9.java week6_10.java
1 import java.util.Scanner;
2
3 public class week6_11 {
4     public static void main(String[] args) {
5         Scanner sc = new Scanner(System.in);
6         System.out.println("Enter String :");
7         String str = sc.nextLine();
8         for (int i = 0; i < str.length(); i++){
9             char c = str.charAt(i);
10            int count = 0;
11            for (int j = 0; j < str.length(); j++) if (str.charAt(j) == c) count++;
12            System.out.println("Freq of "+c+" = "+count);
13        }
14    }
15 }
```

Enter String :

Shafin

Freq of S = 1

Freq of h = 1

Freq of a = 1

Freq of f = 1

Freq of i = 1

Freq of n = 1