ASSIGNMENT_03_Solution

```
//1.
      int i=10;
      while(i<5) //false : No output
      {
        i++;
        System.out.println(i);
      }
  }

//2.
public class Day3_Q2
{
  public static void main(String[] args)
  {
      int result = 90;

      if(result > 40)
          System.out.println("Passed");
      else
          System.out.println("Failed");
  }
}

//3.
      for(int i =0;i<10;i++)
      {
        System.out.print('!'); //10 times printed
      }

      //output : !!!!!!!!!!

//4.
    int number = 10;

      while(number < 15)
      {
        System.out.print("*"); //10 times printed
```

```
        number++;
      }

      //output :

        *
        *
        *
        *
        *

//5.
import java.util.Scanner;
public class Day3_Q5
{
  public static void main(String[] args)
  {
      Scanner sc = new Scanner(System.in);
      System.out.println("Enter the value of i");
      int i  = sc.nextInt();
      System.out.println("Enter the value of j");
      int j  = sc.nextInt();

      while(i<10)
      {
          i++;

          if(j == 0)
          {
            break;
          }
          else if(j ==1)
          {
            continue;
          }
          System.out.println(i);
      }
      System.out.println("Finish");
```

```
  }
}

      //output :
      Enter the value of i
        2
      Enter the value of j
        5

       3
       4
       5
       6
       7
       8
       9
       10
       Finish

// Q. 6
import java.util.Scanner;
public class Day3_Q6
{
  public static void main(String[] args)
  {
  Scanner sc = new Scanner(System.in);
  System.out.println("Enter the value of i :");
  int i = sc.nextInt();

  switch(i)
  {
    case 1: System.out.println("Youonly got 1 mark, see a teacher");
            break;
    case 2: System.out.println("You have fot very low marks,see a teacher");
            break;
    case 3: System.out.println("You have fot  low marks,see a teacher");
            break;
```

```
    case 4: System.out.println("You got less than half marks, you need to do
more");
            break;
    case 5: System.out.println("You got half marks, you need to do mor");
            break;
    case 6: System.out.println("You are doing already but could study more");
            break;
    case 7: System.out.println("congratulation you have done well");
            break;
    case 8: System.out.println("congratulation you have done very well");
            break;
    case 9: System.out.println("congratulation you have almost full marks ");
            break;
    case 10: System.out.println("congratulation you have full marks");
            break;
    default:
              System.out.println("You have failed abysmally");


  }

  sc.close();
  }
}


//7.
import java.util.Scanner;
public class Day3_Q2
{
  public static void main(String[] args)
  {
      Scanner sc = new Scanner(System.in);
      int i;

      do
      {
        System.out.println("Enter the value of i");
        i  = sc.nextInt();
```

```
        System.out.println(i);//for each value of i,only that value of i
printed on console
        //                        if i = 0 , then loop ended
      }while(i != 0);


  }
}
      //output :
      Enter the value of i
      1
      1
      Enter the value of i
      2
      2
      Enter the value of i
      0
      0

//8.
public class Day3_Q8
{
  public static void main(String[] args)
  {
    String name = "Mumbai";
    System.out.println("Hello "+ name);
  }
}
//output : Hello Mumbai

//9.
public class Day3_Q9
{
  public static void main(String[] args)
  {
    for(int i=10;i<=20;i++)
    {
      System.out.println(i);
```

```
    }

  }
}
/*
output :
  10
  11
  12
  13
  14
  15
  16
  17
  18
  19
  20
*/

//10.

public class Day3_Q10
{
  public static void main(String[] args)
  {
      if(i = 10)   //error: cannot find symbol
      {
        System.out.println("Success");
      }


  }
}

//11. Not equal to 0 using for loop

public class Day3_Q11
{
```

```
  public static void main(String[] args)
  {

      for(int i=5;i!=0;i--)
      {
        System.out.print(i+" ");
      }

  }
}
//output : 5 4 3 2 1


//12.

public class Day3_Q12
{
  public static void main(String[] args)
  {
      int i = 15;
      if((i<10) || (i == 15))
        System.out.println(i); //15
  }
}
//output : 15


//13.
import java.util.Scanner;
public class Day3_Q13
{
  public static void main(String[] args)
  {
    Scanner sc = new Scanner(System.in);
    System.err.println("Enter the value of n : ");
    int n = sc.nextInt();
    for(int i=1;i<=10;i++)
    {
      System.out.println(n+" * "+i+" = "+(n * i));
```

```
    }
  }
}
/*
Output:
Enter the value of n :
10
10 * 1 = 10
10 * 2 = 20
10 * 3 = 30
10 * 4 = 40
10 * 5 = 50
10 * 6 = 60
10 * 7 = 70
10 * 8 = 80
10 * 9 = 90
10 * 10 = 100
*/

//14.
import java.util.Scanner;
class Day3_Q14
{
  public static void main(String[] args)
  {
      Scanner sc = new Scanner(System.in);
      System.out.println("Enter the value of n: ");
      int n = sc.nextInt();

      int fact = 1;
      int i = 1;
      while(i <= n)
      {
        fact = fact * i;
        i++;
      }
      System.out.println("Factorial of number "+n+" = "+fact);
```

```
  }

}
/*
output :

Enter the value of n:
6
Factorial of number 6 = 720
*/


//15.
import java.util.Scanner;
public class Day3_Q15
{
  public static void main(String[] args)
  {
    Scanner sc = new Scanner(System.in);
    System.out.println("Enter the value of n: ");
    int n = sc.nextInt();
    int sum = 0;

    while(n > 0)
    {
      int rem = n % 10;
      sum += rem;
      n /= 10;

    }
    System.out.println("Sum of Digit : "+sum);
  }
}

/*
  Enter the value of n:
  153
  Sum of Digit : 9
*/
```

```java
//16. Prime number or not
import java.util.Scanner;

public class Day3_Q16
{
  static boolean isPrime(int n)
  {
    for(int i=2 ; i < n/2 ; i++) //prime number start with 2
    {
      if(n % 2 == 0)
        return true;
    }
    return false;
  }
  public static void main(String[] args)
  {
    Scanner sc = new Scanner(System.in);
    System.out.println("Enter the value of n: ");
    int n = sc.nextInt();

    boolean flag = isPrime(n);
    if(flag == true)
        System.out.println(n+" is not prime number");
    else
        System.out.println(n+" is prime number");

  }
}
/*
  Enter the value of n:
  5
  5 is prime number
*/
```

```java
// Q.17
import java.util.Scanner;
public class Day3_Q17
{
  public static void main(String[] args)
  {
  Scanner sc = new Scanner(System.in);
  System.out.println("Enter the choice :");
  int choice = sc.nextInt();

  switch(choice)
  {
    case 1: System.out.println("January");
            break;
    case 2: System.out.println("February");
            break;
    case 3: System.out.println("March");
            break;
    case 4: System.out.println("April");
            break;
    case 5: System.out.println("May");
            break;
    case 6: System.out.println("June");
            break;
    case 7: System.out.println("July");
            break;
    case 8: System.out.println("August");
            break;
    case 9: System.out.println("September");
            break;
    case 10: System.out.println("October");
            break;
    case 11: System.out.println("November");
            break;
    case 12: System.out.println("December");
            break;
    default:
              System.out.println("Invalid Choice....");
```

```
  }

  sc.close();
  }
}

/*
   Enter the choice :
   4
   April
 */

//18.
import java.util.Scanner;

public class Day3_Q18
{
  public static void main(String[] args)
  {
    Scanner sc = new Scanner(System.in);
    System.out.println("Simple Calculator");
    System.out.println("-----------------------");

    System.out.println("Enter first number: ");
    int num1 = sc.nextInt();
    System.out.println("Enter second number: ");
    int num2 = sc.nextInt();


    System.out.println("\nChoose an operation\n1. Addition\n2. Suntraction\n3.
Multiplication\n4. Division\n");

    System.out.print("Enter the choice: ");
    int choice = sc.nextInt();
    do{
    switch(choice)
```

```
    {
      case 1: System.out.println("Addition: "+num1+" + "+num2+" = "+(num1 +
num2));
          break;

      case 2: System.out.println("Subtraction: "+num1+" - "+num2+" = "+(num1 -
num2));
              break;

      case 3: System.out.println("Multiplication: "+num1+" * "+num2+" = "+(num1
* num2));
              break;

      case 4: System.out.println("Division: "+num1+" / "+num2+" = "+(num1 /
num2));
          break;

      default:
          System.out.println("Invalid Choice....");
    }
  }while(choice != 0);
  }
}

/*
  Simple Calculator
  ----------------------
  Enter first number:
  10
  Enter second number:
  20

  Choose an operation
  1. Addition
  2. Suntraction
  3. Multiplication
  4. Division
```

```
  Enter the choice: 3
  Multiplication: 10 * 20 = 200
*/
```