ASSIGNMENT 16

Q1)Consider the following code snippet

```java
public class CheckMultipleMain {
public void show(int number1) {
   if (number1 >= 0)
     if (number1 == 0)
        System.out.println("first");
     else
        System.out.println("second");
   System.out.println("Third");
 }

  public static void main(String[] args) {
   CheckMultipleMain c = new CheckMultipleMain();
   c.show(3);
  }
}
```

```
second
Third
```

Q2 Using Only spaces and line breaks, reformat the above 1)Code snippet to make control flow easier to understand

```java
public class CheckMultipleMain {
  public void show(int number1) {
    if (number1 >= 0) {
      if (number1 == 0) {
        System.out.println("first");
      }
      else {
        System.out.println("second");
      }
    }
    System.out.println("Third");
  }

  public static void main(String[] args) {
    CheckMultipleMain c = new CheckMultipleMain();
    c.show(3);
```

```
    }
}
```

Q3 Convert the following if-else-if code into switch case for temperature

```
if (var==1)
    System.out.println("low");
else if(var==2)
    System.out.println("medium");
else if(var==3)
    System.out.println("high");
else
    System.out.println("abnormal");
```

Answer

```
public class Temprature {
  public void TempCheck(int var) {
      switch (var) {
        case 1:
            System.out.println("low");
            break;
        case 2:
            System.out.println("medium");
            break;
        case 3:
            System.out.println("high");
            break;
        default:
            System.out.println("abnormal");
            break;
      }
  }

    public static void main(String[] args) {
      Temprature c = new Temprature();
      c.TempCheck(2);
    }
}
```

```
medium

Process finished with exit code 0
```

Q4: Rewrite the following program code using suitable 'if' command

```
switch (m)  {
   case 0:
      x=x+2
      System.out.println("X = "+x);
      break;
   case 1:
      x=x+4
      System.out.println("X = "+x);
      break;
   case 2:
      x=x+6
      System.out.println("X = "+x);
      break;

}
```

----

output

```
public void AddtionValue(int m) {
   if (m == 0) {
      x = x + 2
      System.out.println("X = " + x);
   }
   if(m == 1) {
      x = x + 4
      System.out.println("X = " + x);
   }
   if(m == 2) {
      x = x + 6
      System.out.println("X = " + x);
   }

}
```
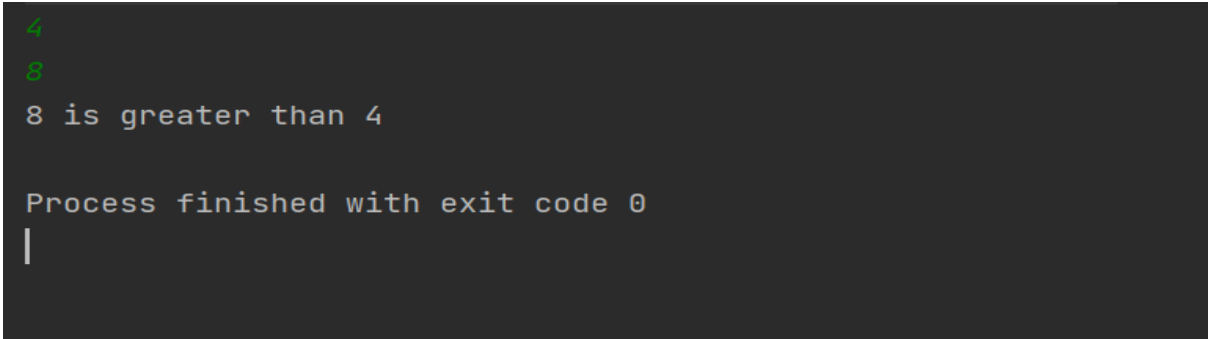
Q5) Take two input values from the user and print the greatest among them

```java
import java.util.Scanner;

class GreaterValueCheck
{
    public void CheckGreatestValue(int first,int second){
        int result=first>second?first:second;
        System.out.println(result+" is greater than "+((first+second)-result));
    }
}
public class CheckMultipleMain {


    public static void main(String[] args) {
        Scanner s=new Scanner(System.in);
        GreaterValueCheck  c = new GreaterValueCheck();
        int first = s.nextInt();
        int second =  s.nextInt();
        c.CheckGreatestValue(first,second);
    }
}
```

```
4
8
8 is greater than 4


Process finished with exit code 0
```

Q6 Take input of age of 3 people by user and determine oldest and youngest among them.(by applying age criteria)

```java
import java.util.Scanner;

class FindOldAndYoung
{
    public void OldestAndYoungest(int first,int second,int third) {
        int oldest=first>second?((first>third)?first:third):(second>third)?second:third;
        int youngest=first<second?((first<third)?first:third):(second<third)?second:third;
        System.out.println("Oldest is "+oldest+"\n youngest is "+youngest);
    }
}
```

```java
public class CheckMultipleMain {


  public static void main(String[] args) {
      Scanner s=new Scanner(System.in);
      FindOldAndYoung c = new FindOldAndYoung();
      int firstAge = s.nextInt();
      int secondAge = s.nextInt();
      int ThirdAge = s.nextInt();
      c.OldestAndYoungest(firstAge,secondAge,ThirdAge);
  }
}
```

```
10
14
18
Oldest is 18
 youngest is 10
```

Q7 Perform below operations:

1)print below data:using any loop and jumping statement

  Monday

  Tuesday

  webnesday

  Friday

  Saturday

  Sunday

OUTPUT

```java
class Week
{
  public void PrintWeek()
  {
    String WeekArray[]={"Monday","Tuesday","Wednesday","Thursday","Friday","Saturday","Sunday"};
    for(String day : WeekArray)
    {
```

```java
            if(day.equals("Thursday"))
                continue;
            System.out.println(day);
        }
    }
}
public class CheckMultipleMain {


    public static void main(String[] args) {
        Week w = new Week();
        w.PrintWeek();


    }
}
```

```
Monday
Tuesday
Wednesday
Friday
Saturday
Sunday
```

2)Out of 7 days in a week, Skip only Today's Day

```java
class Week
{
    public void PrintWeek(String today)
    {

        String WeekArray[]={"Monday","Tuesday","Wednesday","Thursday","Friday","Saturday","Sunday"};
        for(String day : WeekArray)
        {
            if(day.equals(today))
                continue;
            System.out.println(day);
        }
    }
}
public class CheckMultipleMain {


    public static void main(String[] args) {
        Week w = new Week();
        w.PrintWeek("Saturday");
```

```
    }
}
```

```
 Monday
 Tuesday
 Wednesday
 Thursday
 Friday
 Sunday
```

3) Out of 31,print date till today(passed till current date like for jan 1-20 as today is 20th Jan)

```
package DAY_2_20_07_2022_JAVA;
import java.util.Calendar;
import java.util.Date;
import java.util.Formatter;


class DayDate{
  public void PrintDate(int currentDate)
  {
     Calendar calendar = Calendar.getInstance();
     Formatter fmt = new Formatter();
     fmt.format("%tB",calendar);
     String today =fmt.toString();
     for (int datte=1; datte<=currentDate; datte++)
     {
       if(datte!=currentDate)
       System.out.println(today+" - "+datte);
       else
          System.out.println("today is "+currentDate+"th"+" "+ today);
     }
  }
}
public class CheckMultipleMain {


  public static void main(String[] args) {
    DayDate d= new DayDate();
    d.PrintDate(22);


  }
}
```

```
July - 1
July - 2
July - 3
July - 4
July - 5
July - 6
July - 7
July - 8
July - 9
July - 10
July - 11
July - 12
July - 13
July - 14
July - 15
July - 16
July - 17
July - 18
July - 19
July - 20
July - 21
today is 22th July
```

Q8 Diamond Pattern

```java
class Pattern
{
  public void printDiamond()
  {
    int k=-1;
    for(int i=0;i<=8;i++)
    {
      int i1 = i <= 4 ? k++ : k--;
      for(int j=0;j<=9  ;j++)
      {
        if(j>=5-k  && j<=5+k)
        {
          System.out.print("* ");
        }
        else
        {
          System.out.print("  ");
        }
      }
      System.out.println("");
    }
```

```java
    }
}
public class CheckMultipleMain {


    public static void main(String[] args) {
    Pattern p= new Pattern();
    p.printDiamond();


    }
}
```

```
                *
              *  *  *
           *  *  *  *  *
        *  *  *  *  *  *  *
     *  *  *  *  *  *  *  *  *
        *  *  *  *  *  *  *
           *  *  *  *  *
              *  *  *
                *
```