Group Assignment 01 Answers

Q1).

```
class Display
{
  public static void main(String[] args)
  {
    System.out.println("\tThe Java programming language follows the \n \t\t\"Object
Oriented\"\n\t\tprogramming paradigm.");
  }

}
```

Q2.

```
class CalSumDiff
{
  public static void main(String[] args)
  {
    float a = 2.56f;
    float b = 6.98f;
     float sum = a + b;
    float diff = b - a;

     System.out.println("Value of a: "+a);
    System.out.println("Value of b: "+b);
    System.out.println("Value of sum: "+sum);
    System.out.println("Value of diff: "+diff);
  }
}
```

Q3).

```
class CheckPositiveNegative
{
  public static void main(String[] args)
  {
    int number = -3;


    if(number>0) //If a number is greater than zero then it is a positive number
    {
      System.out.println(number + " is a positive number");
    }
    else if(number<0) //If a number is less than zero then it is a negative number
    {
      System.out.println(number + " is a negative number");
    }
    else // If a number is equal to zero then it is neither negative nor positive.
    {
      System.out.println(number + " is neither positive or negative");
    }
  }
}
```

Q4).

Method 01

```
class PrimeNumber
{
  public static void main(String[] args)
  {
    int number = 10;
    int i;
    boolean isPrime = true;

    if(number==1 || number==0)
    {
      System.out.println(number+" is not a prime number");
    }
    else
    {
      for(i=2; i<=number/2; i++ )
      {
        if(number%i ==0 )
        {
          System.out.println(number+" is not a prime number");
          isPrime = false;
          break;
        }
      }
      if(isPrime == true)//If isPrime is true then the number is prime
      {
       System.out.println(number+" is a prime number");
      }
```

```
   }
  }
}
```

Method 02

```
class PrimeNumberCheckAnotherMethod
{
  public static void main(String[] args)
  {
    int number = 10;
    int i;
    boolean isPrime = true;

    for(i=2; i<=number/2; i++ )
    {
      if(number%i ==0 )
      {
        isPrime = false;

      }
    }
  //If isPrime is true then the number is prime else not
    if(isPrime)
      System.out.println(number + " is a Prime Number");
    else
      System.out.println(number + " is not a Prime Number");
  }
}
```

Q5).

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

    int i;
    int sum = 0;

    for(i=0; i<1000; i++ )
    {
      if(i%5 == 0 || i%7 == 0)
      {
        sum = sum + i;
      }
    }
    System.out.println("sum of numbers below 1000 that are divisible by 5 or 7 = "+sum);
  }
}
```

Q6).

a).

```
class StarSquarePattern
{
  public static void main(String[] args)
  {
    int i;
    int k;
    int rowNumber = 6;
    int colNumber = 10;

    for(i=1; i<=rowNumber; i++)
    {
      for(k=1; k<=colNumber; k++)
       {
        if(i==1 || i==rowNumber || k==1 || k==colNumber)
        {
          System.out.print("*");
        }
        else
        {
          System.out.print(" ");
        }
       }
       System.out.println();
    }
 }

}
```

b).

```
class StarTriangularPattern
{
  public static void main(String[] args)
  {
    int i;
    int j;
    int rowNumber = 6;



    for(i=1; i<=rowNumber; i++)
    {
      for(j=1; j<=i; j++)
      {
        System.out.print("*");
      }
      System.out.println();
   }
  }
}
```