Assignment 3 Solutions
Group A

1. **Write a JAVA program to calculate and print the sum of odd integers from 3 to 19.**
2. **Write a JAVA program to printout multiples of 5 less than 80.**
3. **Write a JAVA program to calculate and print the average of even integers from 6 to 100.**
4. **Write a JAVA program to calculate and print the sum of the series:**

   7+11+15+19+ … + 35.
5. **Write a JAVA program to calculate and print the sum of a student's scores in 15 subjects.**
6. **Write a JAVA program to calculate and print the average salary for 30 employees salaries.**
7. **Write a JAVA program to input 10 integer numbers and find the maximum number.**
8. **Write a JAVA program to input 20 integer numbers and find the minimum number.**
9. **Write a JAVA program to input the scores of 20 students in statistics and printout success or failure for each student.**
10. **Write a JAVA program to printout the multiplication table 1 – 12.**
11. **Write a JAVA program to calculate the value of the polynomial:**

$$y = u + \frac{u^2}{2} + \frac{u^3}{3} + \frac{u^4}{4} + \frac{u^5}{5}$$

Solution

1-

```
public class Series
{
  public static void main(String[] args)
  {
    int i, sum=0;
    i=3;
    while(i <= 19)
    {
        sum += i;
        i += 2;
     }
     System.out.println(" the sum =  "+sum);
}
```

2-

```
public class Sequence
{
  public static void main(String[] args)
  {
    int i;
    i=5;
    while(i <= 80)
    {
        System.out.println(i);
        i += 5;
    }
}
```

3-

```
public class Average
{
  public static void main(String[] args)
  {
    int   i , n=0;
    float  avg , sum = 0 ;
    for (i = 6 ; i <= 100 ; i+=2)
    {
       sum+=i;
         n++;
    }
   avg = sum / n ;
   System.out.println(" sum = "+ sum) ;
   System.out.println(" average = ”+ avg ) ;
}
```

4-

```
public class Series
{
  public static void main(String[] args)
  {
    int  i ,sum=0;
    for(i = 7 ; i <= 35 ; i+=4)
    {
        System.out.println(i+" + ");
        sum+=i;
   }
  System.out.print("\b = "+sum);
}
```

5-

```
import java.io.*;
public class Scores
{
 public static void main(String[] args) throws IOException
 {
  int  i ,n=15;
  BufferedReader stdin = new BufferedReader(new InputStreamReader(System.in));
  float  score,sum=0.0;
  for(i = 1 ; i <= n ; i++)
   {
        System.out.print("Enter student's score in subject "+i+" : ");
        score = Double.parseDouble(stdin.readLine());
        sum+= score;
   }
  System.out.println("Sum of given scores is: "+sum);
}
```

6-

Same idea as previous program

Try it yourself!!!

7-

```
import java.io.*;
public class Maximum
{
 public static void main(String[] args) throws IOException
 {
   BufferedReader stdin = new BufferedReader(new InputStreamReader(System.in));
   int n= 10, i;
   float x, max;
   System.out.print("Enter a number ");
   x = Double.parseDouble(stdin.readLine());
   max=x;
   for(i=2; i<=n; i++)                  /* read the next numbers */
    {
      System.out.print("Enter a number ");
      x = Double.parseDouble(stdin.readLine());
      if(max<x)  max=x;
    }
  System.out.println("Maximum number is: "+max);
  }
}
```

8-

Same idea as previous program

Try it yourself!!!

9-

```
import java.io.*;
public class Scores
{
 public static void main(String[] args) throws IOException
 {
   BufferedReader stdin = new BufferedReader(new InputStreamReader(System.in));
   int  i ,n=20;
   float  score;
   for(i = 1; i<=n ; i++)
   {
        System.out.println("Enter student's score");
        score = Double.parseDouble(stdin.readLine());
        if (score>=60)
            System.out.println ("successful ");
        else
            System.out.println ("failed ");
   }
 }
}
```

10-

```
public class Multiplication
{
  public static void main(String[] args)
  {
    int i , j;
    for (i = 1; i <= 12; i++)
          {
            System.out.println();
            for ( j = 1; j <= 12; j++)
                  System.out.println(i+" * "+j+" = "+i*j ) ;
          }
    }
}
```

11-

```
public class Series
{
  public static void main(String[] args)
  {
    int i;
    float u, sum = 0;
    u = 2.5;
    for (i=1; i<=5; i++)
    {
      sum += pow(u,i)/i;
    }
  System.out.println("sum = "+sum ) ;
  }
}
```