Question 1

Write a program to print numbers from 1 to 10.

```
public class Assignment4_Q1 {


	public static void main(String[] args) {
		//  program to print numbers from 1 to 10.


		for (int i=1;i<=10;i++) {
			System.out.println(i);
		}


	}


}
```

Question 2

Write a program to calculate the sum of first 10 natural number.

```
package System.out;
import java.util.Scanner;


public class Assignment4_Q2 {


	public static void main(String[] args) {
		// Write a program to calculate the sum of first 10 natural number.
		int i,num,sum=0;
		Scanner sc=new Scanner(System.in);
		System.out.println("Enter a Natural number for sum till of that number:");


		num=sc.nextInt();
		for(i=1;i<=num;i++) {
			sum=sum+i;


		}
		System.out.println("The sum of numbers is"+sum);



	}


}
```

Question 3

Write a program that prompts the user to input a positive integer. It should then print the multiplication table of that number.

```
package System.out;
import java.util.Scanner;



public class Assignment4_Q3 {


	public static void main(String[] args) {
		// Write a program that prompts the user to input a positive integer.
		//It should then print the multiplication table of that number.
		int i;
		Scanner sc=new Scanner(System.in);
		System.out.println("Enter a postive number:");
		int num=sc.nextInt();
		if (num<=0) {
			System.out.println("Enter a postive number");



		}
		else {
			for(i=1;i<=10;i++) {
				System.out.println(num + " * "+ i +" = " +(num*i));



			}
```

```
        }

    }
}
```

Question 4

Write a program to find the factorial value of any number entered through the keyboard.

```
package System.out;

import java.util.Scanner;

public class Assignment4_Q6 {

    public static void main(String[] args) {

        // TODO Auto-generated method stub
        int num,fact=1,i;
        Scanner scanner=new Scanner(System.in);
        System.out.println("Enter a number:");
        num=scanner.nextInt();
        for(i=1;i<=num;i++) {
            fact=fact*i;

        }

        System.out.println("The factorial of the given number is: " + fact);
```

```
        }

}
```

Question 5

Two numbers are entered through the keyboard. Write a program to find the value of one number raised to the power of another. (Do not use Java built-in method)

```
import java.util.Scanner;
public class Assignment4_Q4 {


        public static void main(String[] args) {
                // two numbers entered through keyboard .write a program to find the value of one number raise to the number raised to the power of another
                int i,j,result;
                Scanner scanner=new Scanner(System.in);
                System.out.println("Enter a number:");
                i=scanner.nextInt();
                System.out.println("Enter a  power of number:");
                j=scanner.nextInt();
                result=i;
                for( int k=1;k<j;k++) {
                        result=result*i;



                }
                System.out.println(result);
```

```
    }

}
```

Question 6

Write a program that prompts the user to input an integer and then outputs the number with the digits reversed. For example, if the input is 12345, the output should be 54321.

```
import java.util.Scanner;
public class Assignment4_Q5 {


    public static void main(String[] args) {
        // Reverse of a number
        int i,number, reverse = 0;
        Scanner scanner=new Scanner(System.in);
        System.out.println("Enter a number:");
        i=scanner.nextInt();
        number=i;
        while(number != 0)
        {
        int remainder = number % 10;
        reverse = reverse * 10 + remainder;
        number = number/10;
        }
        System.out.println("The reverse of the given number is: " +          reverse);
```

```
        }
}
```

Question 7

Write a program that reads a set of integers, and then prints the sum of the even and odd integers.

```
package System.out;
import java.util.Scanner;



public class Assignment4_Q7 {

        public static void main(String[] args) {

            Scanner sc = new Scanner(System.in);

            int number;

            char choice;

            int evenSum = 0;

            int oddSum = 0;

            do

            {

               System.out.print("Enter the number ");

               number = sc.nextInt();
```

```
            if( number % 2 == 0)

            {

               evenSum += number;

            }

            else

            {

               oddSum += number;

            }

            System.out.print("Do you want to continue y/n? ");

            choice = sc.next().charAt(0);

        }while(choice=='y' || choice == 'Y');

        System.out.println("Sum of even numbers: " + evenSum);

        System.out.println("Sum of odd numbers: " + oddSum);

    }

}
```

Question 8

Write a program that prompts the user to input a positive integer. It should then output a message indicating whether the number is a prime number.

```
import java.util.Scanner;

public class Assignment4_Q8 {


        public static void main(String[] args) {
                // TODO Auto-generated method stub
           int num ;
           Scanner sc=new Scanner(System.in);
                   System.out.println("Enter a postive number:");
                    num=sc.nextInt();


           boolean flag = false;
           for (int i = 2; i <= num / 2; ++i) {


            if (num % i == 0) {
              flag = true;
              break;
             }
           }


           if (!flag)
             System.out.println(num + " is a prime number.");
           else
             System.out.println(num + " is not a prime number.");
         }


        }
```

Question 9

Write a program to calculate HCF of Two given number.

```
package System.out;
import java.util.Scanner;


public class Assignment4_Q9 {


	public static void main(String[] args) {
		// TODO Auto-generated method stub
		int num1,num2,i,hcf=0 ;
	   Scanner sc=new Scanner(System.in);
		System.out.println("Enter 1st number:");
		num1=sc.nextInt();
		System.out.println("Enter 2nd number:");
		num2=sc.nextInt();
		for(i=1;i<=num1 ||i<=num2;i++) {
			if(num1%i==0 && num2%i==0) {
				hcf=i;
			}

		}
		System.out.println("The HCF of 2 numbers is:"+hcf);

	}

}
```

Question 10

Write a do-while loop that asks the user to enter two numbers. The numbers should be added and the sum displayed. The loop should ask the user whether he or she wishes to perform the operation again. If so, the loop should repeat; otherwise it should terminate.

Question 11

Write a program to enter the numbers till the user wants and at the end it should display the count of positive, negative and zeros entered.

```
package System.out;


package System.out;
import java.util.Scanner;


public class Assignment4_Q11 {


	public static void main(String[] args) {
		// TODO Auto-generated method stub
		 char opt; int num,positiveNum=0,negativeNum=0,zero=0;
	    Scanner sc=new Scanner(System.in);
	    do {
			System.out.println("Enter a number:");
			num=sc.nextInt();
			if(num>0) {
				positiveNum++;
				}
			else if(num<0){
				negativeNum++;
```

```
                }
                else
                        zero++;


            System.out.println("Enter more number type Y:");
            opt=sc.next().charAt(0);
           }
           while(opt=='y'||opt=='Y');
           System.out.println("Count of positive number:"+positiveNum);
           System.out.println("Count of negative number:"+negativeNum);
           System.out.println("Count of Zero:"+zero);



        }

}
```

Question 12

Write a program to enter the numbers till the user wants and at the end the program should display the largest and smallest numbers entered.

```
package System.out;
import java.util.Scanner;


public class Assignment4_Q12 {


        public static void main(String[] args) {
                // TODO Auto-generated method stub
                //display the largest and smallest number entered.
```

```
        Scanner sc= new Scanner(System.in);
        char opt;int num;int
        //built in methods are used to find max and min values
        largest=Integer.MIN_VALUE,smallest=Integer.MAX_VALUE;
         do {
                System.out.println("Enter a number:");
                num=sc.nextInt();
                if(num>largest)
                largest=num;
                else if(num<smallest)
                smallest=num;

            System.out.println("Enter more number type Y:");
            opt=sc.next().charAt(0);
           }
            while(opt=='y'||opt=='Y');
         System.out.println("the largest numbers is "+ largest);
         System.out.println("the negative numbers is "+smallest);


    }

}
```