

Question 1

Write a program to print numbers from 1 to 10.

```
package Assignment4;

public class Question1 {

    public static void main(String[] args)

    {

        for(int i=1;i<=20;i++)

        {

            System.out.println(i);

        }

    }

}
```

Question 2

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

```
package Assignment4;

public class Ques2 {

    public static void main(String[] args)

    {

        int sum=0; //1

        for(int i=1;i<=10;i++)

        {

            sum=sum+i; //1+2
```

```
System.out.println(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 Assignment4;  
  
import java.util.Scanner;  
  
public class Ques3 {  
  
    public static void main(String[] args) {  
  
        // TODO Auto-generated method stub  
  
        Scanner scanner=new Scanner(System.in);  
  
        System.out.println("Enter a integer");  
  
        int n=scanner.nextInt();  
  
        for(int i=1;i<=10;i++) //taking loop to repeat 10times  
        { //2*2=4  
  
            System.out.println(n+"*"+i+"="+i*n); //printing table  
  
        }  
  
    }  
  
}
```

Question 4

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

```
package Assignment4;

import java.util.Scanner;

public class Ques4 {

    public static void main(String[] args) {

        // TODO Auto-generated method stub

        Scanner scanner=new Scanner(System.in);

        System.out.println("Enter a integer");

        int num=scanner.nextInt();

        int fact=1; //1 because we are multiplying

        for(int i=1;i<=num;i++)

        {

            fact=fact*i; // 5!

        }

        System.out.println("Factorial of number is: "+fact);
        //printing table

    }

}
```

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)

```
package Assignment4;
```

```

import java.util.Scanner;

public class Ques5 {

    public static void main(String[] args) {

        // TODO Auto-generated method stub

        Scanner sc=new Scanner(System.in);

        System.out.print("Enter a Base number: "); //printing base
        value

        int a=sc.nextInt(); //a=2

        System.out.print("Enter a Power number: "); //printing
        power value

        int p=sc.nextInt(); //p=4 --> 2*2*2*2

        int res=1; //initializing result as 1 because we want to
        multiply

        for(int i=1;i<=p;i++)

        {

            res=res*a;

        }

        System.out.println(a+" to the power " +p+ " is "+res);

    }

}

```

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.

```

package Assignment4;

```

```

import java.util.Scanner;

public class Ques6 {

public static void main(String[] args) {

// TODO Auto-generated method stub

int n,res;

System.out.println("Enter a no:");

Scanner sc=new Scanner(System.in);

n=sc.nextInt();

while(n>0) //123

{

res=n%10; //gives reminder 3

System.out.println(res); //print res

n=n/10; //12 will store in n and loop will repeat

}

}

}

```

Question 7

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

```

package Assignment4;

import java.util.Scanner;

public class Ques7 {

public static void main(String[] args) {

```

```
// TODO Auto-generated method stub

Scanner sc=new Scanner(System.in);

System.out.println("Enter a number: ");

int n=sc.nextInt();

int sum1=0,sum2=0;

for(int i=0;i<=n;i++)

{

    if(i%2==0)

    {

        sum1=sum1+i;

    }

    else

    {

        sum2=sum2+i;

    }

    System.out.println("sum of even number: "+sum1);

    System.out.println("sum of odd number: "+sum2);

}

}

}
```

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.

```
package Assignment4;

import java.util.Scanner;

public class Ques8 {

    public static void main(String[] args) {

        // TODO Auto-generated method stub

        int num;

        System.out.println("Enter a number: ");

        Scanner sc=new Scanner(System.in);

        num =sc.nextInt();

        if(num%2>0)

        {

            System.out.println("It is prime");

        }

        else

        {

            System.out.println("It is not prime");

        }

    }

}
```

Question 9

Write a program to calculate HCF of Two given number.

```
package Assignment4;

import java.util.Scanner;
```

```

public class Ques9 {

    public static void main(String[] args) {

        // TODO Auto-generated method stub

        Scanner scanner=new Scanner(System.in);

        System.out.println("Enter a num1: "); //taking 2 numbers
        from input -->num1

        int num1=scanner.nextInt();

        System.out.println("Enter a num2: "); //num2

        int num2=scanner.nextInt();

        int hcf=0; //initializing hcf

        for(int i=1;i<=num1 || i<=num2;i++) {

            if(num1%i==0 && num2%i==0)

                hcf=i;

        }

        System.out.println("HCF of given two number 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.

```

package Assignment4;

import java.util.Scanner;

```



```

public class Ques10 {
    public static void main(String[] args) {
        // TODO Auto-generated method stub
        System.out.println("Enter a number: ");
        Scanner sc=new Scanner(System.in);
        int a=sc.nextInt();
        int b=sc.nextInt();
        int sum=0,operation=0;
        do {
            sum=sum+a+b;
            System.out.println(sum);
            System.out.println("Do you wish to perform operation: Y/N
" );
            operation=sc.next().charAt(0);
        }
        while(operation=='Y' || operation=='y');
        System.out.println("sum "+sum);
    }
}

```

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 Assignment4;

```

```
import java.util.Scanner;

public class Ques11 {

    public static void main(String[] args) {

        // TODO Auto-generated method stub

        Scanner sc=new Scanner(System.in);

        int cp=0,cn=0,cz=0,num;

        char choice;

        do {

            System.out.println("Enter a number: ");

            num=sc.nextInt();

            if(num>0)

            {

                cp++;

            }

            else if(num<0)

            {

                cn++;

            }

            else

            {

                cz++;

            }

            System.out.println("do you want to continue y/n ");
```

```

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

}

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

System.out.println("Positive numbers: " + cp);

System.out.println("Negative numbers: " + cn);

System.out.println("Zero numbers: " + cz);

}

}

```

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 Assignment4;

import java.util.Scanner;

public class Ques12 {

    public static void main(String[] args) {

        // TODO Auto-generated method stub

        Scanner sc = new Scanner(System.in);

        int num;

        int max = Integer.MIN_VALUE;

        int min = Integer.MAX_VALUE;

        char choice;

        do

        {

```

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

num = sc.nextInt();

if(num > max)

{
    max = num;
}

if(num < min)

{
    min = num;
}

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

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

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

System.out.println("Largest number: " + max);

System.out.println("Smallest number: " + min);

}

}
```