

1)

```
public class PrintNumbers
{
    public static void main(String[] args)
    {
        for(int i=1; i<=10; i++)//4
        {
            System.out.print(i);//1 2 3 4
        }
    }
}
```

2)

```
public class SumNumbers      1 2 3+4 7 + 5 = 12+6==18
{
    public static void main(String[] args)
    {
        int sum = 0;
        for(int i=1; i<=10; i++)//4
        {
            sum += i;//3=3+3==6
        }
        System.out.println("Sum: " + sum);
    }
}
```

3)

```
import java.util.Scanner;

public class Table
{
    public static void main(String[] args)
    {
        Scanner console = new Scanner(System.in);
        int num;
```

```

System.out.print("Enter any positive integer: ");
num = console.nextInt();//12

System.out.println("Multiplication Table of " + num);

for(int i=1; i<=10; i++)
{
    System.out.println(num + " x " + i + " = " + (num*i) );
        12 * 2 = 24
    }
}

```

Output:

4)

```

import java.util.Scanner;

public class FactorialDemol
{
    public static void main(String[] args)
    {
        Scanner console = new Scanner(System.in);
        int num; // To hold number
        int fact = 1; // To hold factorial

        System.out.print("Enter any positive integer: ");
        num = console.nextInt();//4

        for(int i=1; i<=num; i++)4
        {
            fact *= i;//fact=fact*I;//1=1*2=2=2*3=6=6*4=24
        }

        System.out.println("Factorial: "+ fact);
    }
}

```

5)

```

import java.util.Scanner;

```

```

public class PowerDemo
{
    public static void main(String[] args)
    {
        Scanner console = new Scanner(System.in);

        int base;
        int power;
        int result = 1;

        System.out.print("Enter the base number ");
        base = console.nextInt();//2

        System.out.print("Enter the power ");
        power = console.nextInt();//4

        for(int i = 1; i <= power; i++)//5<=4
        {
            result *= base;//8=2*8==16
        }

        System.out.println("Result: "+ result);//16
    }
}

```

6)

```

import java.util.Scanner;

public class ReverseNumber
{
    public static void main(String[] args)
    {
        Scanner console = new Scanner(System.in);

        int number;
        int reverse = 0;

        System.out.print("Enter the number ");
        number = console.nextInt();
    }
}

```

```

int temp = number;// temp=12345
int remainder = 0;

while(temp>0)//12>0
{
    remainder = temp % 10;//12345%10=5 1234%10=4 123%10=3 12%10=2
1%10=1
    reverse = reverse * 10 + remainder;//5432*10+1 54321
    temp /= 10;//temp=temp/10 1234=1234/10=123 123/10=12 12/10= 1
}

System.out.println("Reverse of " + number + " is " + reverse);
}
}

```

7)

```

import java.util.Scanner;

public class ReadSetIntegers
{
    public static void main(String[] args)
    {
        Scanner console = new Scanner(System.in);

        int number;
        char choice;
        int evenSum = 0;
        int oddSum = 0;

        do
        {
            System.out.print("Enter the number ");
            number = console.nextInt();

            if( number % 2 == 0)
            {
                evenSum += number;//evensum=evensum+number 12=12+14
            }
            else
            {
                oddSum += number;//0=0+13=13=13+15 ==28
            }
        }
    }
}

```

```

    }

    System.out.print("Do you want to continue y/n? ");
    choice = console.next().charAt(0);

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

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

```

8)

```

import java.util.Scanner;

public class TestPrime
{
    public static void main(String[] args)
    {
        Scanner console = new Scanner(System.in);        6  2 3 4 5

        int number;

        System.out.print("Enter the positive integer ");
        number = console.nextInt();

        boolean flag = true;

        6
        for(int i = 2; i < number; i++)
        {
            if(number % i == 0)//6%2==0
            {
                flag = false;
                break;
            }
        }

        if(flag && number > 1)//(false && true) false
        {
            System.out.println("Number is prime");
        }
        else
    }
}

```

```

        {
            System.out.println("Number is not prime");
        }

    }
}

```

9)

```

import java.util.Scanner;

public class FindHcf
{
    public static void main(String[] args)
    {
        Scanner console = new Scanner(System.in);

        int dividend, divisor;
        int remainder, hcf = 0;

        System.out.print("Enter the first number ");
        dividend = console.nextInt(); //10

        System.out.print("Enter the second number ");
        divisor = console.nextInt();    //7

        do
        {
            remainder = dividend % divisor; //7%1==0

            if(remainder == 0)
            {
                hcf = divisor; //5
            }
            else
            {
                dividend = divisor; //7
                divisor = remainder; //1
            }

        }while(remainder != 0);

        System.out.println("HCF: " + hcf);
    }
}

```

```
    }  
}
```

10)

```
import java.util.Scanner;  
  
public class SumAgain  
{  
    public static void main(String[] args)  
    {  
        Scanner console = new Scanner(System.in);  
  
        int number1, number2;  
        char choice;  
  
        do  
        {  
            System.out.print("Enter the first number ");  
            number1 = console.nextInt();  
  
            System.out.print("Enter the second number ");  
            number2 = console.nextInt();  
  
            int sum = number1 + number2;  
            System.out.println("Sum of numbers: " + sum);  
  
            System.out.print("Do you want to continue y/n? ");  
            choice = console.next().charAt(0);  
  
            System.out.println();  
  
        }while(choice=='y' || choice == 'Y');  
    }  
}
```

11)

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

```

public static void main(String[] args)
{
    Scanner console = new Scanner(System.in);

    int number,
        countPositive = 0,
        countNegative = 0,
        countZero = 0;

    char choice;

    do
    {
        System.out.print("Enter the number ");
        number = console.nextInt();

        if(number > 0)
        {
            countPositive++;
        }
        else if(number < 0)
        {
            countNegative++;
        }
        else
        {
            countZero++;
        }

        System.out.print("Do you want to continue y/n? ");
        choice = console.next().charAt(0);

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

    System.out.println("Positive numbers: " + countPositive);
    System.out.println("Negative numbers: " + countNegative);
    System.out.println("Zero numbers: " + countZero);
}
}

```

12)

```
import java.util.Scanner;
```



```

public class FindMaxMin
{
    public static void main(String[] args)
    {
        Scanner console = new Scanner(System.in);

        int number;
        int max = Integer.MIN_VALUE; // Intialize max with minimum value
        int min = Integer.MAX_VALUE; // Intialize min with maximum value

        char choice;

        do
        {
            System.out.print("Enter the number ");
            number = console.nextInt();//2

            if(number > max)//3>12
            {
                max = number;//12
            }

            if(number < min)//3<0
            {
                min = number;
            }

            System.out.print("Do you want to continue y/n? ");
            choice = console.next().charAt(0);

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

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

```