1. Write a Java program to Take three numbers from the user and print the greatest number.

Ans :- import java.util.Scanner;

public class greatestno {

    public static void main(String[] args) {

        Scanner sc = new Scanner(System.in);

        int x = sc.nextInt();

        int y = sc.nextInt();

        int z = sc.nextInt();

       int s = (x>y && x>z? x:(y>z? y:z));

       System.out.println("the greatest number amongs three is "+s);

       sc.close();

    }

}

1. Write a Java program that takes the user to provide a single character from the alphabet. Print Vowel or Consonant, depending on the user input. If the user input is not a letter (between a and z or A and Z), or is a string of length > 1, print an error message.

Ans :- import java.util.Scanner;

public class vowelconsonant {

    public static void main(String[] args) {

        Scanner sc = new Scanner(System.in);

        char c = sc.nextLine().charAt(0);

        char z = Character.toUpperCase(c);

        if(z=='A'||z=='E'||z=='I'||z=='O'||z=='U')

        {

            System.out.println("it is a vowel number:");

        }

        else{

            System.out.println("it is consonant:");

        }

        sc.close();

    }

}

1. Write a Java program that takes a year from user and print whether that year is a leap year or not.

Ans :- import java.util.Scanner;

public class leapyear {

    public static void main(String[] args){

        Scanner sc = new Scanner(System.in);

        int y;

        System.out.println("enter the year: ");

        y = sc.nextInt();

        do{

            if(y%4==0 && y%100!=0)

        System.out.println("it is a normal leap year: "+y);

        }while (y%400==0);

        System.out.println("it is a not leap year:"+y);

         sc.close();

        }

    }

1. Write a program in Java to display the first 10 natural numbers using while loop.

Ans :- public class naturalno {

        public static void main(String[] args) {

            System.out.println("The First 10 Natural Numbers are");

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

            {

                System.out.println(i);

            }

        }

}

1. Write a program in Java to input 5 numbers from keyboard and find their sum and average using for loop.

Ans :-  import java.util.Scanner;

public class Exercise12 {

  public static void main(String[] args)

{

    int i,n=0,s=0;

    double avg;

    {

        System.out.println("Input the 5 numbers : ");

    }

        for (i=0;i<5;i++)

        {

            Scanner in = new Scanner(System.in);

            n = in.nextInt();

        s +=n;

    }

    avg=s/5;

    System.out.println("The sum of 5 no is : " +s+"\nThe Average is : " +avg);

}

}

1. • Write a program in Java to display the pattern like right angle triangle with a number. 1 12 123 1234 12345

Ans :- public class pattern6 {

    public static void main(String[] args) {

        int i = 1;

        while(i<=5)

        {

            int j = 1;

            while(j<=i)

            {

                System.out.print(j);

                j = j + 1;

            }

            System.out.println();

            i  = i + 1;

        }

    }

}

1. • Write a Java program that reads a positive integer and count the number of digits the number.

Ans :- import java.util.Scanner;

public class positiveint {

    public static void main(String[] args)

    {

        Scanner in = new Scanner(System.in);

        System.out.print("Input an integer number less than ten billion: ");

        if (in.hasNextLong())

        {

            long n = in.nextLong();

            if (n < 0)

            {

                n \*= -1;

            }

            if (n >= 10000000000L)

            {

                System.out.println("Number is greater or equals 10,000,000,000!");

            }

            else

            {

                int digits = 1;

                if (n >= 10 && n < 100)

                {

                    digits = 2;

                }

                else if (n >= 100 && n < 1000)

                {

                    digits = 3;

                }

                else if (n >= 1000 && n < 10000)

                {

                    digits = 4;

                }

                else if (n >= 10000 && n < 100000)

                {

                    digits = 5;

                }

                else if (n >= 100000 && n < 1000000)

                {

                    digits = 6;

                }

                else if (n >= 1000000 && n < 10000000)

                {

                    digits = 7;

                }

                else if (n >= 10000000 && n < 100000000)

                {

                    digits = 8;

                }

                else if (n >= 100000000 && n < 1000000000)

                {

                    digits = 9;

                }

                else if (n >= 1000000000 && n < 10000000000L)

                {

                    digits = 10;

                }

                System.out.println("Number of digits in the number: " + digits);

            }

        }

        else

        {

            System.out.println("The number is not an integer");

        }

    }

}

1. Write a Java program to count the letters, spaces, numbers and other characters of an input string.

Ans :- public class exercise {

 public static void main(String[] args) {

        String test = "Aa kiu, I swd skieo 236587. GH kiu: sieo?? 25.33";

        count(test);

    }

    public static void count(String x){

        char[] ch = x.toCharArray();

        int letter = 0;

        int space = 0;

        int num = 0;

        int other = 0;

        for(int i = 0; i < x.length(); i++){

            if(Character.isLetter(ch[i])){

                letter ++ ;

            }

            else if(Character.isDigit(ch[i])){

                num ++ ;

            }

            else if(Character.isSpaceChar(ch[i])){

                space ++ ;

            }

            else{

                other ++;

            }

        }

        System.out.println("The string is : Aa kiu, I swd skieo 236587. GH kiu: sieo?? 25.33");

        System.out.println("letter: " + letter);

        System.out.println("space: " + space);

        System.out.println("number: " + num);

        System.out.println("other: " + other);

            }

}

1. Write a Java program to print the ASCII value of a given character.

Ans:- public class ascii {

    public static void main(String[] args)

{

// character whose ASCII value to be found

char ch1 = 'a';

char ch2 = 'b';

// variable that stores the integer value of the character

int asciivalue1 = ch1;

int asciivalue2 = ch2;

System.out.println("The ASCII value of " + ch1 + " is: " + asciivalue1);

System.out.println("The ASCII value of " + ch2 + " is: " + asciivalue2);

}

}

1. Write a Java program that accepts an integer (n) and computes the value of n+nn+nnn. Input number: 5

Ans :-    import java.util.Scanner;

public class integer {

 public static void main(String[] args) {

   Scanner sc = new Scanner(System.in);

  int n;

 System.out.print("Input number: ");

  n = sc .nextInt();

  System.out.printf("%d + %d%d  + %d%d%d\n", n, n, n, n, n, n);

  sc.close();

 }

}

1. • Write a Java program to display the system time.

Ans:- public class time {

    public static void main(String[] args){

        System.out.format("\nCurrent Date time: %tc%n\n", System.currentTimeMillis());

   }

}

1. Write a Java program to print numbers between 1 to 100 which are divisible by 3, 5 and by both.

Ans :- public class divby2no {

    public static void main(String args[]) {

        System.out.println("\nDivided by 3: ");

        for (int i=1; i<100; i++) {

            if (i%3==0)

            System.out.print(i +", ");

        }

        System.out.println("\n\nDivided by 5: ");

        for (int i=1; i<100; i++) {

            if (i%5==0) System.out.print(i +", ");

        }

        System.out.println("\n\nDivided by 3 & 5: ");

        for (int i=1; i<100; i++) {

            if (i%3==0 && i%5==0) System.out.print(i +", ");

        }

        System.out.println("\n");

  }

}

1. W.A.J.P to get the character at the given index within the String. Original String = Tops Technologies! The character at position 0 is T, The character at position 10 is o

Ans :- public class index {

    public static void main(String[] args)

    {

        String str = "Java Exercises!";

        System.out.println("Original String = " + str);

        // Get the character at positions 0 and 10.

        int index1 = str.charAt(0);

        int index2 = str.charAt(10);

        // Print out the results.

        System.out.println("The character at position 0 is " +

            (char)index1);

        System.out.println("The character at position 10 is " +

            (char)index2);

    }

}

1. W.A.J.P to concatenate a given string to the end of another string.

Ans :- public class endstring {

    public static void main(String[] args)

    {

        String str1 = "PHP Exercises and ";

        String str2 = "Python Exercises";

        System.out.println("String 1: " + str1);

        System.out.println("String 2: " + str2);

        String str3 = str1.concat(str2);

        System.out.println("The concatenated string: " + str3);

    }

}

1. W.A.J.P to create the validate method that takes integer value as a parameter. If the age is less than 18, then throw an Arithmetic Exception otherwise print a message welcome to vote.

Ans :-  import java.util.Scanner;

    class AgeException extends Exception {

        public AgeException(String str) {

         System.out.println(str);

        }

       }

       public class ageexception {

        public static void main(String[] args) {

         Scanner sc = new Scanner(System.in);

         System.out.print("Enter ur age :: ");

         int age = sc.nextInt();

         try {

          if(age < 18)

           throw new AgeException("Invalid age");

          else

           System.out.println("Valid age");

         }

         catch (AgeException a) {

          System.out.println(a);

         }

         sc.close();

        }

}