



STEPPING STONE

SCHOOL (HIGH)

CLASS : X

Subject: Computer Application **Date: 28/04/20**

Topic: String manipulation **Time Limit: 2 hours**

Worksheet No.:1

Concept :

Character.isUpperCase(c har) : Is used to check whether given character is uppercase or not.

Character.toLowerCase(char) : is used to convert character to uppercase

Character.isLowerCase(c)) : Is used to check whether given character is lower or not

Character.toUpperCase(c); : is used to convert character to lowercase.

Example 1.

// To input a String and change all uppercase letters to lower case and vice versa.

```
class program
{
    public static void main(String s)
    {
        int i,l=0;
        char c=' ';
        l=s.length()-1;
        for(i=0;i<=l;i++)
        {
            c=s.charAt(i);
            if(Character.isUpperCase(c))
            {
                c=Character.toLowerCase(c);
            }
            else if(Character.isLowerCase(c))
            {
                c=Character.toUpperCase(c);
            }
        }
    }
}
```

```
        System.out.print(c);
    }
}
}
```

**Same program can be done by using ASCII value,
Where ASCII value of A to Z is from 65 to 90
And ASCII value of a to z is from 97 to 122.**

(Please refer to your class school copy)

Example 2.

// Problem Input a line of text and print each word in different lines.

```
class program
{
    public static void main(String s)
    {
        s=s+" ";
        int i,l=0;
        String t="";
        char c=' ';

        l=s.length()-1;

        for(i=0;i<=l;i++)
        {
            c=s.charAt(i);
            if(c!=' ')
            {
                t=t+c;
            }
            else
            {
                System.out.println(t);

                t="";
            }
        }
    }
}
```

```
    }  
}
```

In the above program Inputting a line of text in the variable s. We are adding a space at the end of the line s by using the statements =s+" ";

Inside the loop we are extracting each letter from the line of text by using the variable c.

c=s.charAt(i);

If the value of the variable c is not a space (i.e any other letter) we are adding that to the string variable t, so whenever value of c is space we are printing the value of t which itself is a word, and then making the variable t empty so that we in the variable t we can store the new word.

[Copy the questions and solve them on a sheet of paper date wise. Keep the worksheets ready in a file to be submitted on the opening day.]

Exercise

- 1 Input a word and print the word along with the length of the word.
- 2 Input a word (in lower case) and count number of vowels.
- 3 Input a word and print first letter and last letter of the word.
- 4 Input a word from the user and print the reverse of the word.
5. Input a word from the user and print each letter along with their ascii value.
6. Input a word and check whether consecutive duplicate letters are present or not. e.g apple where p is consecutive duplicate letter

7. Input a word and check whether the word is palindrome or not.

**8. Input a line of text and count number of words present
in the line. e.g. Input : I am going.**

Output : 3

**9. Input a line of text and print number of letters
present in each word in different line.**

e.g.

Input: I am going

Output:

1

2

5

**10 .Input a line of text and print each word along with number
of letters present in the word**

Input: He is going

Output:

He 2

Is 2

Going 5

