

## **PRACTICAL-1**

### **Program Code:**

```
import java.util.*;

class Vowels_practice
{
    public static void main(String[] args)
    {
        String str="1111111212ABCDEIOUFGFDGEabcdeiueioe1212121";
        int count=0;
        for(int i=0;i<str.length();i++)
        {
            char c=str.charAt(i);

            if(c=='A'||c=='E'||c=='I'||c=='O'||c=='U'||c=='a'||c=='e'||c=='i'||c=='o'||c=='u')
                count++;
            else
                continue;
        }

        System.out.println("Number of vowels : "+count);
    }
}
```

### **Output:**

```
C:\Java\JAVA_practicals>javac Vowels_practice.java

C:\Java\JAVA_practicals>java Vowels_practice
Number of vowels : 15
```

## **PRACTICAL-2**

### **Program Code:**

```
import java.util.*;
class Find_practice
{
    public static void main(String[] args)
    {
        int count_char=0,count_digit=0,count_symbol=0;
        String str="Depstar @2020";
        for(int i=0;i<str.length();i++)
        {
            char c=str.charAt(i);
            if (c>='A' && c<='z')
                count_char++;
            else if(c>='0' && c<='9')
                count_digit++;
            else if(c!=' ')
                count_symbol++;
            else
                continue;
        }
        System.out.println("Total Characters : "+count_char);
        System.out.println("Total Digit : "+count_digit);
        System.out.println("Total Symbols : "+count_symbol);
    }
}
```

**Output:**

```
C:\Java\JAVA_practicals>javac Find_practice.java  
  
C:\Java\JAVA_practicals>java Find_practice  
Total Characters : 7  
Total Digit : 4  
Total Symbols :1
```

## **PRACTICAL-3**

### **Program Code:**

```
import java.util.*;

class Check_Password
{
    public static void main(String[] args)
    {
        int count_upper=0,count_digit=0,count_symbol=0,count_lower=0;
        Scanner input=new Scanner(System.in);
        System.out.print("Enter your password : ");
        String str=input.nextLine();
        if(str.length()<8)
            System.out.println("Your password is invalid, Please select a strong
password");
        else{
            for(int i=0;i<str.length();i++)
            {
                char c=str.charAt(i);
                if (c>='A' && c<='Z')
                    count_upper++;
                else if(c>='a'&&c<='z')
                    count_lower++;
                else if(c>='0' && c<='9')
                    count_digit++;
                else if(c!=' ')
                    count_symbol++;
                else
                    continue;
            }
        }
```

```
        if(count_upper>=1 && count_digit>=1 &&
count_symbol>=1&&count_lower>=0)

            System.out.println("Your password satisfied all the
conditions\nPassword accepted");

        else

            System.out.println("Your password is invalid, Please select a strong
password");

    }

}

}
```

**Output:**

```
C:\Java\JAVA_practicals>javac Check_Password.java

C:\Java\JAVA_practicals>java Check_Password
Enter your password : Parth#70
Your password satisfied all the conditions
Password accepted
```

## **PRACTICAL-4**

### **Program Code:**

```
import java.util.*;

class String_anagram
{
    public static void main(String[] args)
    {
        Scanner input=new Scanner(System.in);
        System.out.print("Enter the string 1 : ");
        String str1=input.nextLine();
        System.out.print("Enter the string 2 : ");
        String str2=input.nextLine();
        char str1_array[]=str1.toCharArray();
        Arrays.sort(str1_array);
        char str2_array[]=str2.toCharArray();
        Arrays.sort(str2_array);
        if(Arrays.equals(str1_array,str2_array))
            System.out.println(str1+" and "+str2+" are anagrams");
        else
            System.out.println(str1+" and "+str2+" are not anagrams");
    }
}
```

### **Output:**

```
C:\Java\JAVA_practicals>javac String_anagram.java

C:\Java\JAVA_practicals>java String_anagram
Enter the string 1 : ABCD
Enter the string 2 : DCBA
ABCD and DCBA are anagrams
```