(Object Oriented Programming)

EXPERIMENT – 8

TITLE : Strings Handling and Wrapper Class

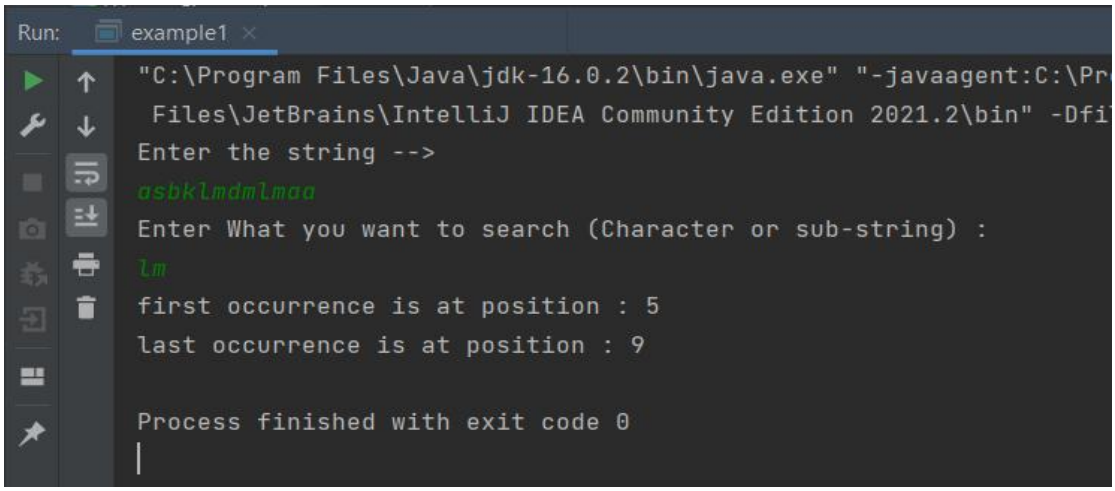
1. Write a program for searching strings for the first occurrence of a character or substring and for the last occurrence of a character or substring.

CODE :

```
package oops_lab08;

import java.io.*;
class example1
{
   public static void main(String[]args) throws Exception
   {
      int len1, len2, last = 0;
      DataInputStream in = new DataInputStream(System.in);
      System.out.println("Enter the string --> ");
      String s1 = in.readLine();
      System.out.println("Enter What you want to search (Character or sub-string) : ");
      String s2 = in.readLine();
      len1 = s1.length();
      len2 = s2.length();

      for(int i = 0; i <= (len1 - len2); i++)
      {
         if(s1.substring(i, len2+i).equals(s2))
         {
            if(last == 0)
               System.out.println("first occurrence is at position : " + (i+1));
            last = i + 1;
         }
      }
      if(last != 0)
         System.out.println("last occurrence is at position : " + last);
```

```
        else
            System.out.println("the string is not found");
    }
}
```

OUTPUT :



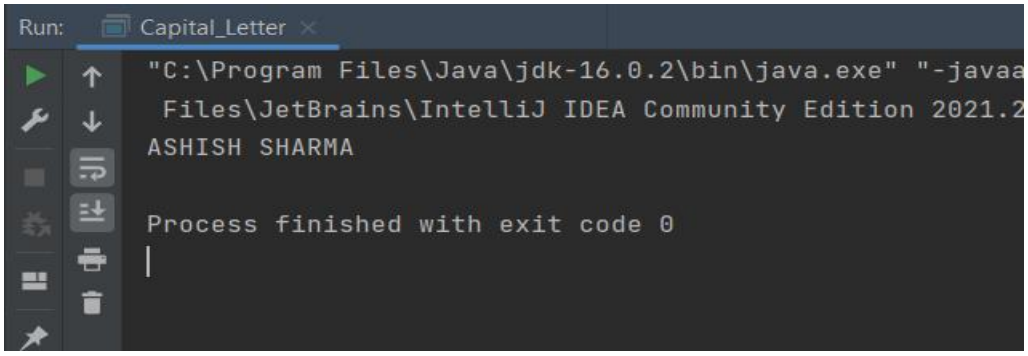
2. Write a program that converts all characters of a string in capital letters. (Use StringBuffer to store a string). Don't use inbuilt function.

CODE :

```
package oops_lab08;

public class Capital_Letter {

    static void Convert(StringBuffer str)
    {
```

```
    int ln = str.length();

    for (int i = 0; i < ln; i++) {
        Character c = str.charAt(i);
        if (Character.isLowerCase(c))
            str.replace(i, i + 1, Character.toUpperCase(c) + "");
        else
            str.replace(i, i + 1, Character.toLowerCase(c) + "");
    }
}

public static void main(String[] args)
{
    StringBuffer str = new StringBuffer("ashish sharma");
    Convert(str);

    System.out.println(str);
}
}
```

OUTPUT :

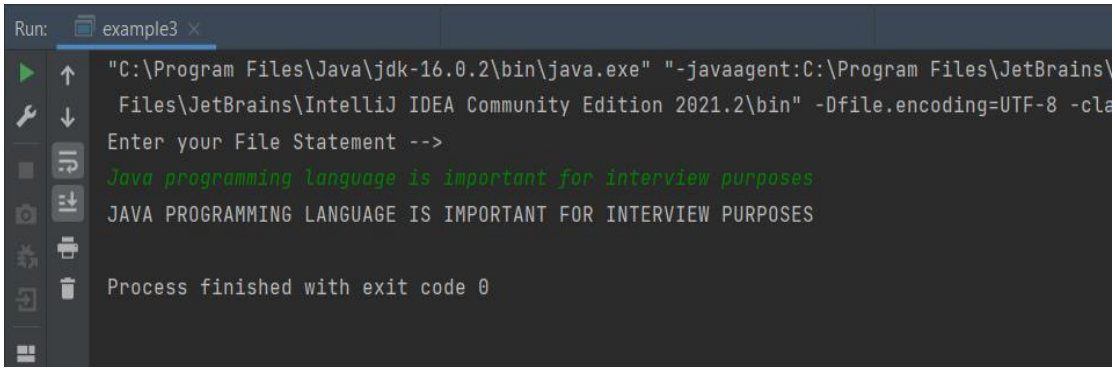


3. Write a program in Java to read a statement from console, convert it into upper case and again print on console. (Don’t use inbuilt function)

CODE :

```
package oops_lab08;

import java.io.* ;
public class example3 {
   public static void main(String a[]) throws IOException
   {
      DataInputStream in=new DataInputStream(System.in);
      System.out.println("Enter your File Statement --> ");
      String s1=in.readLine();
      System.out.println(s1.toUpperCase());
   }
}
```

OUTPUT :

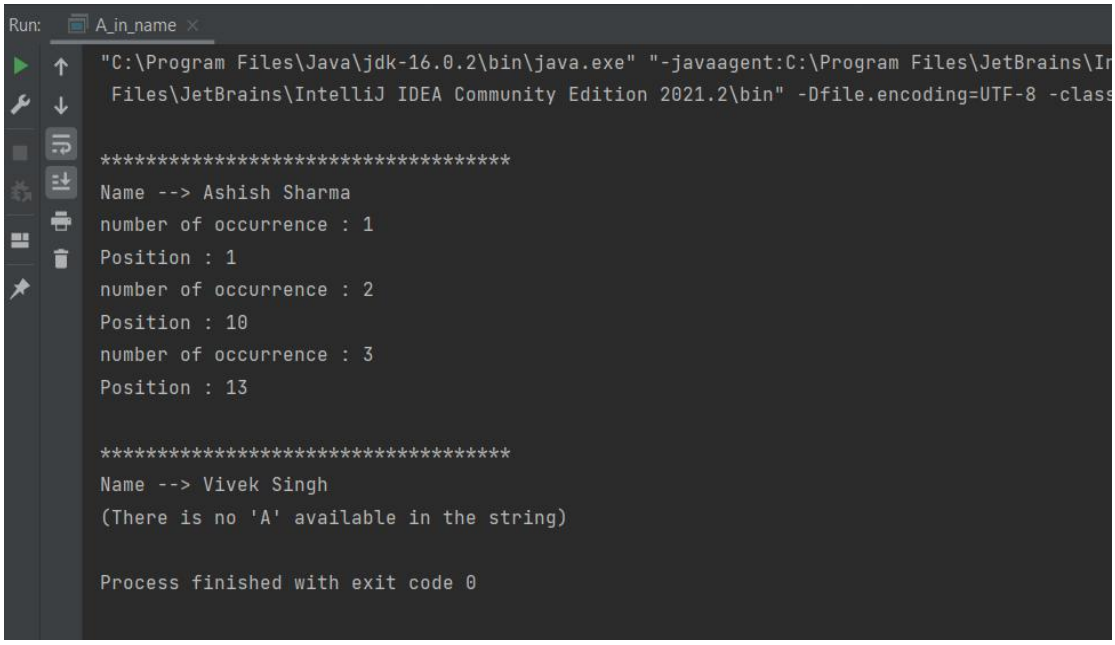


4. Write a program in Java to create a String object. Initialize this object with your name. Find the length of your name using the appropriate String method. Find whether the character ‘a’ is in your name or not; if yes find the number of times ‘a’ appears in your name. Print locations of occurrences of ‘a’ .Try the same for different String objects

CODE :

```
package oops_lab08;

class data
{
   String name;
   data(String n) {
      name=n;
   }

   void disp()
   {
      System.out.println("\n************************************");
      System.out.println("Name --> " + name);
      int c = 0;
      int len = name.length();
      for(int i = 0; i < len; i++)
         if(name.charAt(i) == 'a'|| name.charAt(i) == 'A')
         {
            c++;
            System.out.println("number of occurrence : " + c);
            System.out.println("Position : " + (i+1));
         }

      if(c==0)
         System.out.println("(There is no 'A' available in the string)");
   }
}

class A_in_name
{
   public static void main(String ar[])
   {
      data d1 = new data("Ashish Sharma");
      d1.disp();

      data d2 = new data("Vivek Singh");
      d2.disp();
   }
}
```

OUTPUT :



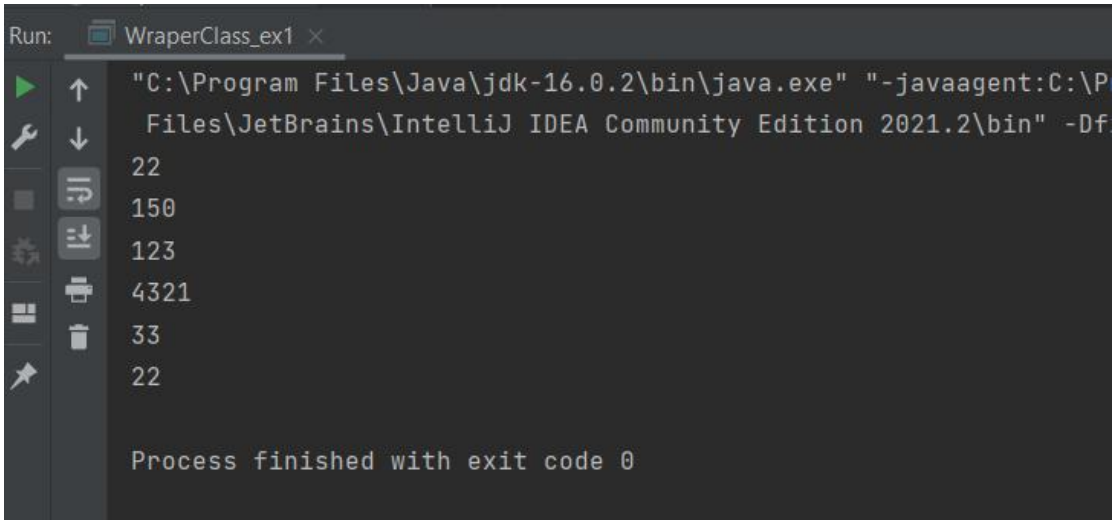
TITLE : Wrapper Classes

1. Write a Java code that converts int to Integer, converts Integer to String, converts String to int, converts int to String, converts String to Integer converts Integer to int.

CODE :

```
package oops_lab08;

class WraperClass_ex1{

    public static void main(String[] args){
        int i = 22;
        Integer Int = new Integer(i);
        System.out.println(Int);

//        Converting Integer to String

        String s = Integer.toString(150);
        System.out.println(s);

//        Converting String to Int

        int o = Integer.parseInt("123");
        System.out.println(o);

//        Converting Int to String

        String str = Integer.toString(432);
        System.out.println(str + 1);

//        Converting String to Integer

        int sr = Integer.valueOf(33);
        System.out.println(sr);

//        Integer to Int

        Integer intobject = new Integer(10);
        int integer = intobject.intValue();
        System.out.println(i);
    }
}
```

OUTPUT :



2. Write a Java code that converts float to Float converts Float to String converts String to float converts float to String converts String to Float converts Float to float.

CODE :

```
package oops_lab08;

public class WraperClass_ex2 {
    public static void main(String[] args){
        float fl = 11.1f;
        System.out.println(fl);

//        Converting Float to String
        String s = Float.toString(12.2F);
        System.out.println(s);

//        Converts String to float
        float flt = Float.parseFloat("10.3");
        System.out.println(flt);

//        Converts float to String
```

```
        String str = String.valueOf(55.5);
        System.out.println(str);

//        Converts String to Float
        float flo = Float.parseFloat("22.8");
        System.out.println(flo);

//        Converts Float to float
        Float foa = new Float(32.6);
        System.out.println(flo);
    }
}
```

OUTPUT :