

CS261 LAB1

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Section:2B

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Task 1: Write a program to check whether input character is vowel or consonant.

Solution Code:

```
import java.util.*;
public class checkvc{
    Run | Debug
    public static void main(String args[]){
        Scanner sc =new Scanner(System.in);
        System.out.println(x: "Enter a character:");
        char y= sc.next().charAt(index: 0);           //Scanning input of a character
        char x=Character.toLowerCase(y);             //converting the character into lowercase
        if(x=='a' || x=='e' || x=='i' || x=='o' || x=='u'){ //checking of vowel or consonant
            System.out.println(x: "Vowel");
        }else{                                       //if the character is a,e,i,o,u then its vowel
            System.out.println(x: "Consonant");      // otherwise its consonant
        }
        sc.close();
    }
}
```

OUTPUT:

```
PS D:\Java\OOPCS261> cd "d:\Java\OOPCS261\" ; if ($?) { javac checkvc.java } ; if ($?) { java checkvc }
Enter a character:
A
Vowel
```

```
PS D:\Java\OOPCS261> cd "d:\Java\OOPCS261\" ; if ($?) { javac checkvc.java } ; if ($?) { java checkvc }
Enter a character:
c
Consonant
```

Task 2: Write a Program to find the area of a circle using constructor.

Solution code:

```
1  import java.util.*;
2  public class AOCUCT {
3      public static double area(float r){                //creating method to calculate area
4          double a= 3.1416*(Math.pow(r,b: 2));          //using the math library
5          return a;
6      }
7      Run | Debug
8      public static void main(String[] args) {
9          Scanner sc=new Scanner(System.in);
10         System.out.println(x: "Enter the length of radius:");
11         float r=sc.nextFloat();                        //scanning input of radius
12         System.out.print(s: "Area of the circle is: ");
13         System.out.format(format: "%.2f", area(r));     //Calling the method to print area
14         sc.close();
15     }
```

OUTPUT:

```
PS D:\Java\OOPCS261> cd "d:\Java\OOPCS261\" ; if ($?) { javac AOCUCT.java } ; if ($?) { java AOCUCT }
Enter the length of radius:
5
Area of the circle is: 78.54
```

```
PS D:\Java\OOPCS261> cd "d:\Java\OOPCS261\" ; if ($?) { javac AOCUCT.java } ; if ($?) { java AOCUCT }
Enter the length of radius:
8.2
Area of the circle is: 211.24
```