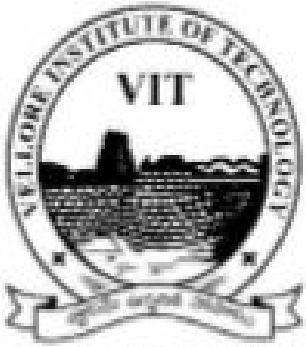
ASSIGNMENT - 1



VIT AP

AMARAVATI

School of Computer Science and Engineering
CSE1004 – Problem Solving Using Java
Digital Assignment

70034 - Prof. Deepasikha Mishra - SE

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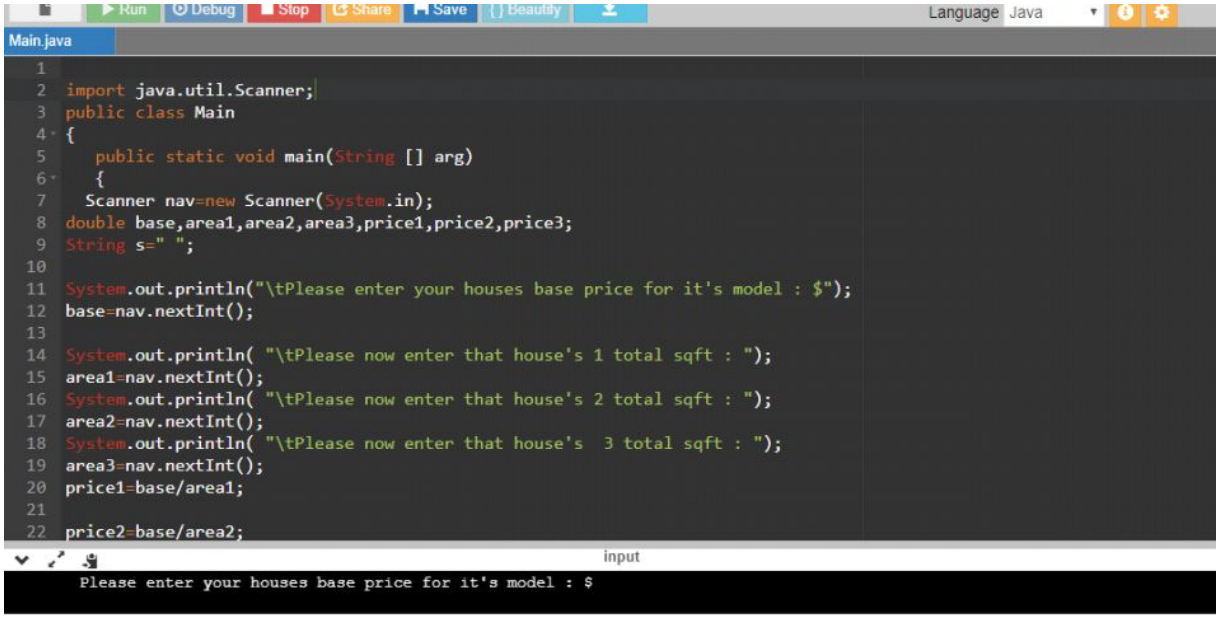
1. Samantha and Vikas are looking to buy a house in a new development. After looking at various models the three models they like are colonial, splitentry, and single-story. The builder gave them the base price and the finished area in square feet of the three models. They want to know the price per square foot of the three models and the model with the least price per square foot. Write a program that accepts as input the base price and the finished area in square feet of the three models. The program outputs the price per square foot of the three models and the model with the least price per square foot.

```
import java.util.Scanner;
public class Main
{
 public static void main(String [] arg)
 {
 Scanner nav=new Scanner(System.in);
double base,area1,area2,area3,price1,price2,price3;
String s=" ";
System.out.println("\tPlease enter your houses base price for it's model : $");
base=nav.nextInt();
System.out.println( "\tPlease now enter that house's 1 total sqft : ");
area1=nav.nextInt();
System.out.println( "\tPlease now enter that house's 2 total sqft:");
area2=nav.nextInt();
System.out.println( "\tPlease now enter that house's 3total sqft :");
area3=nav.nextInt();
price1=base/area1;
price2=base/area2;
price3=base/area3;
if(price1<price2&&price1<price3)
 {s="house 1";
System.out.println( "min price :" +s);}
if(price3<price2&&price3<price2)
```

```
{s="house 2";
System.out.println( "min price :" +s);}
if(price3<price2&&price3<price1)
 {s="house 3";
System.out.println( "min price :" +s);}
}
 }
```



2. Write a program that prompts the user to input the x-y coordinate of a point in a Cartesian plane. The program should then output a message indicating whether the point is the origin, is located on the x- (or y-) axis, or appears in a particular quadrant.

```
import java.util.*;
class Main {
static void quadrant(int x, int y)
{
if (x > 0 && y > 0)
System.out.println("lies in First quadrant");
else if (x < 0 && y > 0)
System.out.println("lies in Second quadrant");
else if (x < 0 && y < 0)
System.out.println("lies in Third quadrant");
else if (x > 0 && y < 0)
System.out.println("lies in Fourth quadrant");
else if (x == 0 && y > 0)
System.out.println("lies at positive y axis");
else if (x == 0 && y < 0)
System.out.println("lies at negative y axis");
else if (y == 0 && x < 0)
System.out.println("lies at negative x axis");
else if (y == 0 && x > 0)
System.out.println("lies at positive x axis");
else
```

```
System.out.println("lies at origin");
}
public static void main(String[] args)
{
int x = 1, y = 1;
quadrant(x, y);
}
```

```java
import java.io.*;

class Main {
    static void quadrant(int x, int y)
    {
        if (x > 0 && y > 0)
            System.out.println("lies in First quadrant");

        else if (x < 0 && y > 0)
            System.out.println("lies in Second quadrant");

        else if (x < 0 && y < 0)
            System.out.println("lies in Third quadrant");

        else if (x > 0 && y < 0)
            System.out.println("lies in Fourth quadrant");

        else if (x == 0 && y > 0)
            System.out.println("lies at positive y axis");

        else if (x == 0 && y < 0)
            System.out.println("lies at negative y axis");
```

input

```
lies in First quadrant


...Program finished with exit code 0
```