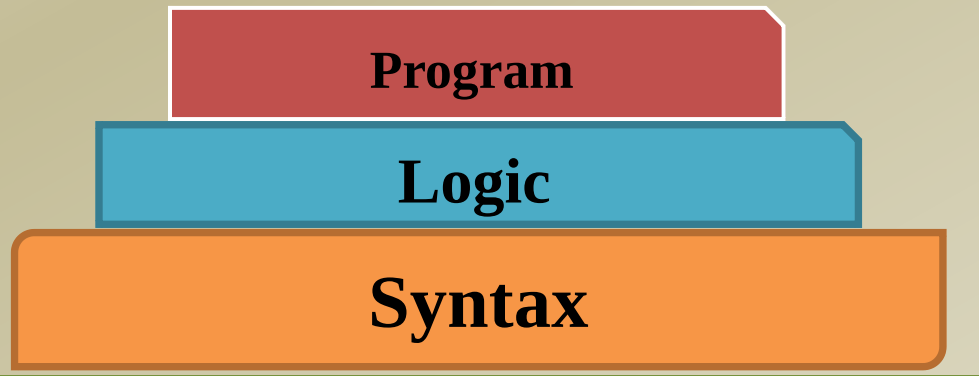
Code at Random (OPC) PVT. LTD.

# Nested If-Else Based Programs



# Problem Statement 1

- WAP to input type & price(as D or L) of computer purchased, and print the discount & net amount to be paid by customer.

| Price | Desktop(D) | Laptop(L) |
|---|---|---|
| **Up to 30,000** | 5% | 3% |
| **Up to 50,000** | 10% | 7% |
| **More than that** | 20%+100 | 15%+50 |

- Explanation: If the type of the computer is Desktop(D) and the actual price is 45,000/- then the discount applicable will be 10% on the actual price.
- The net amount for the computer will be 45,000 – 10% = 40,500/-

# Solution of Problem 1

```
import java.util.*;

class computer {

    public static void main(String Args[]) {

        char type;

        double price,amount, discounted_price= 0.0;

        Scanner sc= new Scanner(System.in);

        System.out.println("Enter the type as D or L and
price of the computer");

        type= sc.next().charAt(0);

        price= sc.nextDouble();

        if(price<=30000) {

            if(type=='D'||type==‘d’)

                discounted_price= 0.05*price;
```

```
else if(type=='L'||type=='l’)
   discounted_price= 0.03*price;
else
    System.out.println("Invalid Choice"); }
else if(price>3000&&price<=50000) {
     if(type=='D'||type=='d')
         discounted_price= 0.10*price;
     else if(type=='L'||type=='l')
         discounted_price= 0.07*price;
      else
         System.out.println("Invalid Choice");
}
else {
    if(type=='D'||type=='d’)
         discounted_price= (0.20*price)+100;
     else if(type=='L'||type=='l’)
          discounted_price= (0.15*price)+50;
      else
         System.out.println("Invalid Choice");
 }
        amount= price - discounted_price;
        System.out.println("The amount of your computer is: "+amount);
    }
```

# Problem Statement 2

- WAP to input age & distance of passenger travelling, and print the ticket accordingly.

| Age | Distance | Rate/km |
|---|---|---|
| **1 - 5** | Up to 3 km | 0 |
| | Up to 10 km | 2 |
| | More than that | 5 |
| **6 - 50** | Up to 3 km | 5 |
| | Up to 10 km | 10 |
| | More than that | 20 |
| **More than 50** | Up to 3 km | 3 |
| | Up to 10 km | 8 |
| | More than that | 15 |

- Explanation: If the age of the passenger is 15 and the distance to be travelled will be 14 then for the ticket- first 3kms is 5rs/km, then for next 7km is 10rs/km and for next 4kms – 20rs/km.
- The total price of the trip will be – 3*5+7*10+(distance-10)*20 = 125rs.

# Solution of Problem 2

```
import java.util.*;

class computer {

    public static void main(String Args[]) {

 int age, distance,price;

        Scanner sc= new Scanner(System.in);

        System.out.println("Enter the age and distance to be
travelled by  the passenger");

        age= sc.nextInt();

        distance= sc.nextInt();

if(age>=1&&age<=5)   {

            if(distance<=3)

                price = 0;

            else if(distance>3&&distance<=10)
```

```
 price = (distance-3)*2;
else
   price = 0*3 + 7*2 + (distance-10)*5;
else if(age>=6&&age<=50)
        {
            if(distance<=3)
               price = 5*distance;
            else if(distance>3&&distance<=10)
               price = 5*3+(distance-3)*10;
             else
                price = 3*5 + 7*10 + (distance-10)*20;
        }
else {
    if(type=='D'||type=='d’)
         discounted_price= (0.20*price)+100;
     else if(type=='L'||type=='l’)
          discounted_price= (0.15*price)+50;
      else
         System.out.println("Invalid Choice");
if(discounted_price>0.0) {
  amount= price - discounted_price;
        System.out.println("The amount of your computer is: "+amount);
    }
}
```