

Decision Making Statement

Decision making statement is used for work with conditional programming.

Means if we have some condition and if we want to check then we can decision making statement.

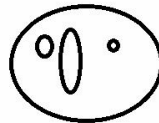
Types of Decision Making Statement

1. Simple if statement
2. If else statement
3. Else if ladder
4. Nested if statement
5. Switch statement

Now we want to discuss about simple if statement

Syntax of simple statement

```
if( condition )  
{  
    write here your logics  
}
```



write here other statements

Example with source code

```
import java.util.*;  
public class SimpleIfApp  
{ public static void main(String x[])  
    { Scanner xyz =new Scanner(System.in);//  
      int a,b;  
      System.out.println("Enter two values");  
      a=xyz.nextInt();  
      b=xyz.nextInt();  
      if(a>b)  
      { System.out.println("A is Greater");
```

```

    }
    if(b>a)
    { System.out.println("B is Greater");
    }
    if(a==b)
    { System.out.println("A is Equal with B");
    }

}
}

```

If else statement

When we have two conditions exact opposite of each other then we can use if else statement.

Syntax:

```

if(condition)
{ write here your logics
}
else{
    write here your logics
}
other statement

```

Note: if your condition in if block is true then execute if statement otherwise execute else block.

Example with source code

```

import java.util.*;
public class SimpleIfApp
{
    public static void main(String x[])
    {
        Scanner xyz =new Scanner(System.in);//
        int a,b;
        System.out.println("Enter two values");
        a=xyz.nextInt();
    }
}

```

```

        b=xyz.nextInt();
        if(a>b)
        { System.out.println("A is Greater");
        }
        else{
            System.out.println("B is Greater");
        }
    }
}

```

Example: WAP to input the quantity and rate of product and calculate its total bill and if bill is greater than 10000 then apply 10% discount on bill if bill is less than 10000 then apply 2 % discount on bill.

1. Input two values
2. Calculate its total bill
3. If bill amount is greater than 10000 then apply percentage logic on total bill with 10% and calculate discount amount and minus discount amount from total bill
4. if bill amount is less than 10000 then apply percentage logic on total bill with 2% and calculate discount amount and minus discount amount from total bill
5. display the bill with discount amount.

Bill Before discount 11000

```

import java.util.*;
public class BillWithDiscount
{ public static void main(String x[])
{ Scanner xyz = new Scanner(System.in);
  int qty,rate,total,dis;
  System.out.println("Enter quantity and rate");
  qty=xyz.nextInt(); //11
  rate=xyz.nextInt(); //1000
  total = qty*rate; //11*1000 = 11000
  System.out.println("Bill Before discount "+total);
  if(total > 10000) //11000 > 10000
  { dis = total*10/100;
    total = total-dis;
  }
  else{
    dis = total*2/100;
    total = total-dis;
  }
  System.out.println("Bill After discount "+total);
}
}

```

11	1000	10900	1100
qty	rate	total	dis

Example: WAP to input character from keyboard and convert lower case character to upper case and upper case character to lower case.

Note: if we want to work with any character data then we should have to know the ASCII code

Q. What is ASCII Code?

American Standard code for information and interchange called as ASCII.

Def: ASCII is intermediate language which is used for store every key on character as digit in system.

There are total 256 ASCII code is there.

Digit: 0- 48 to 9-57

Capital Letters: A = 65 to Z= 90

Small letters: A = 97 to Z=122

Example

```
import java.util.*;
public class CharConvertApp
{
    public static void main(String x[])
    {
        Scanner xyz = new Scanner(System.in);
        char ch;
        System.out.println("Enter character");
        ch=xyz.nextLine().charAt(0); //use for single character input
        System.out.printf("Before Converging character is %c\n",ch);
        if(ch>=97 && ch<=122) //ch>='a' && ch<='z'
        {
            ch= (char)((int)(ch-32));
        }
        else{
            ch= (char)((int)(ch+32));
        }
        System.out.printf("After converting character is %c\n",ch);

    }
}
```