

# Logic Building Session

## Day 4: March 2022

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**Find the output of following java program.**

```
class MainClass  
{  
    public static void main (String arg[])  
    {  
        System.out.print('h' + 'i');  
        System.out.println();  
    }  
}
```

```
class Output {  
    public static void main(String[] args) {
```

```
        System.out.println("1. println");
```

```
        System.out.println("2. println");
```

```
        System.out.print("1. print");
```

```
        System.out.print("2. print");
```

```
    }
```

```
}
```

1.println

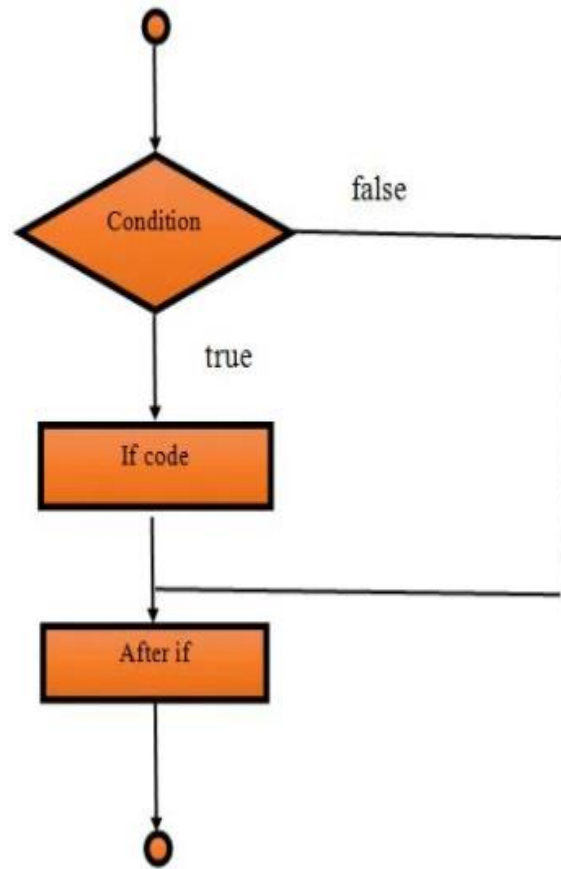
2.println

1.print2.print

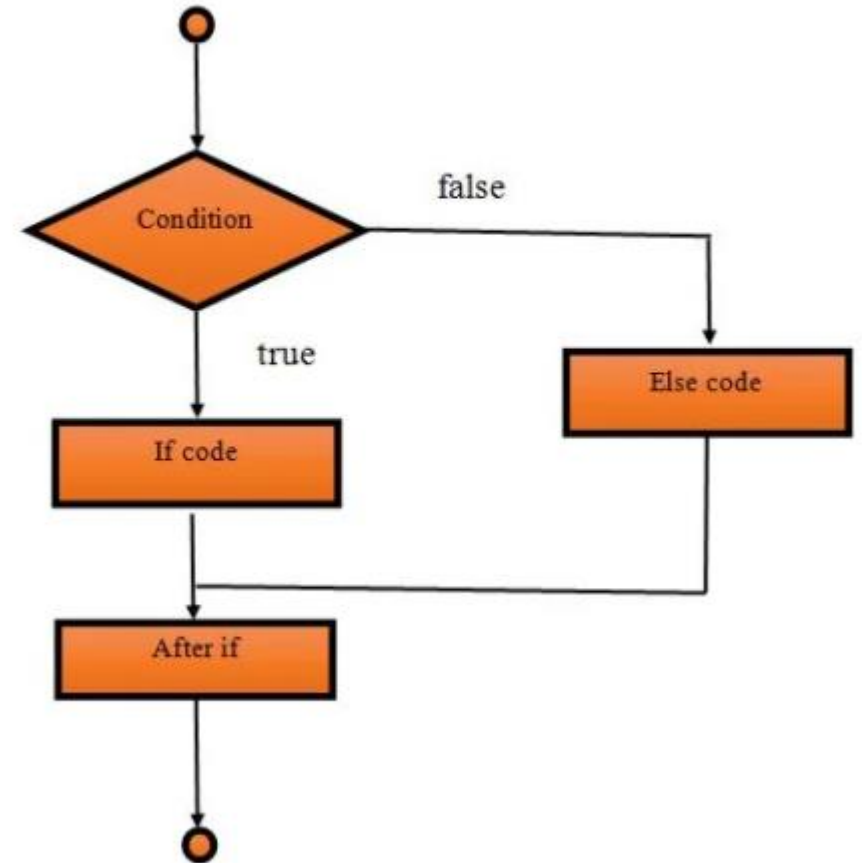
# If, else if, switch

- Java If Else Statement
- **There are four types of if statement in Java:**
  - if statement
  - if-else statement
  - if-else-if ladder
  - nested if statement

**Data-flow-diagram of If Block**



**Data-flow-diagram of If Else Block**

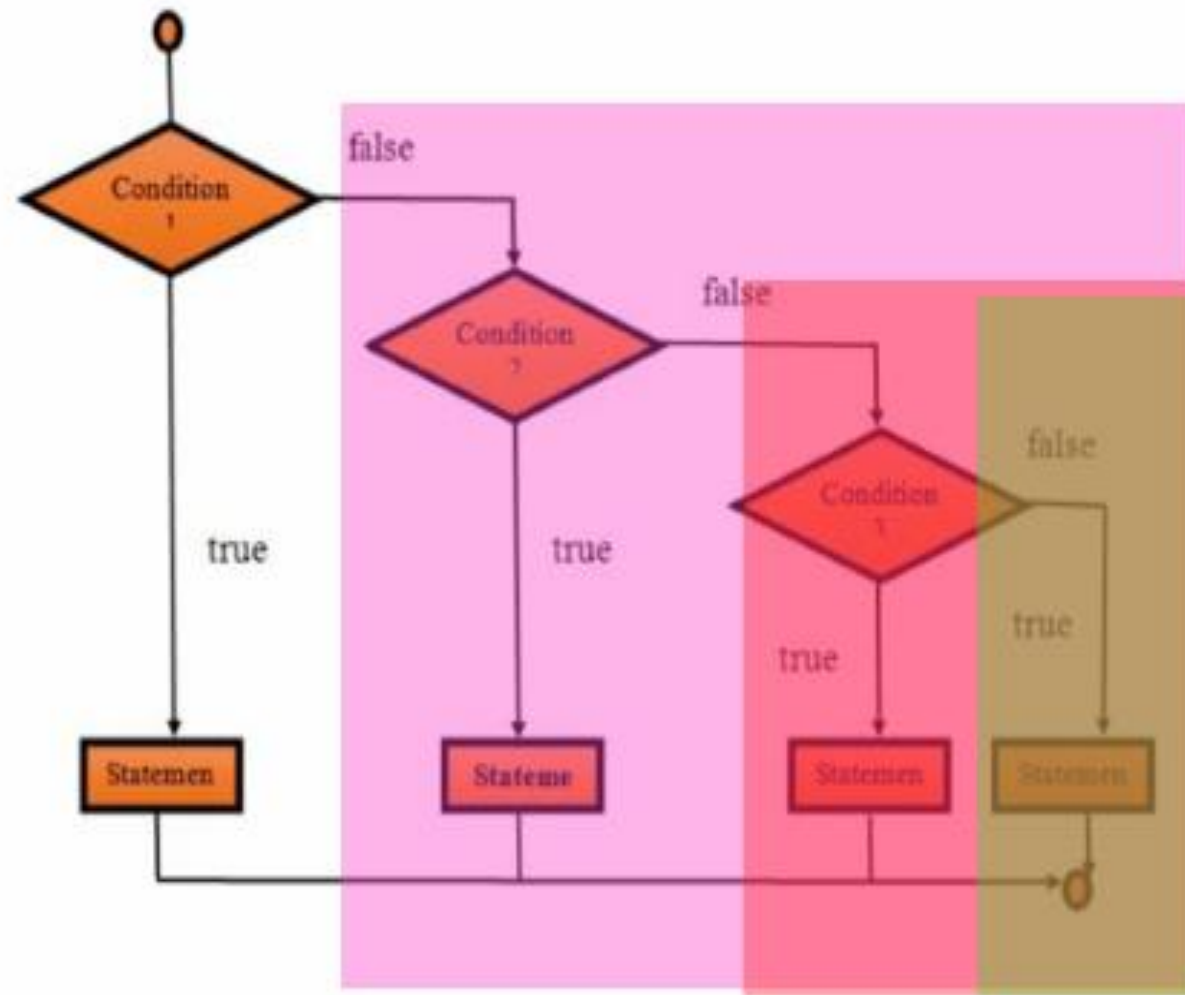


```
public static void main(String args [])
{
    Scanner sc = new Scanner(System.in);
    System.out.println("Enter Marks: ");
    int marks=sc.nextInt();

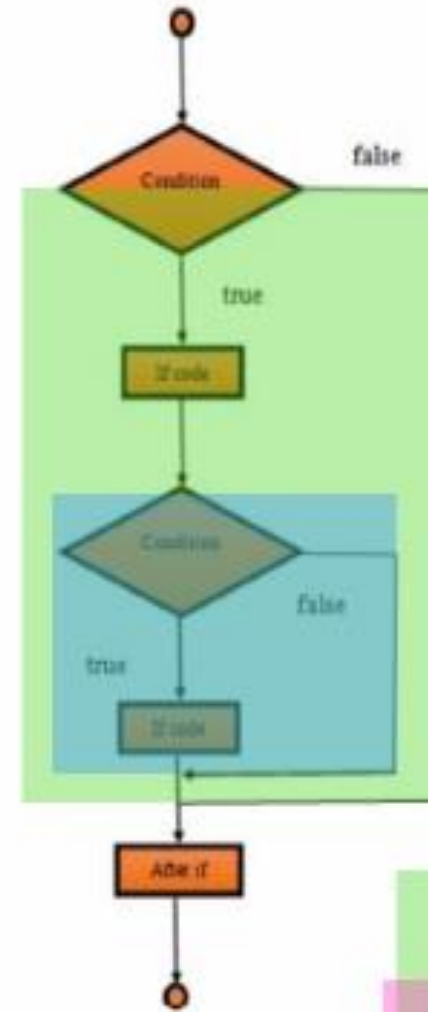
    if(marks > 65)// 55 > 65=> incorrect/false/no
    {
        System.out.println("First Division");//First Division
    }
    else
    {
        System.out.println("Fail");
        System.out.println("Reappear for Exam");
    }

}
```

Data-flow-diagram of If Else If Block



Data-flow-diagram of Nested If Block



Nested

Not Nesting

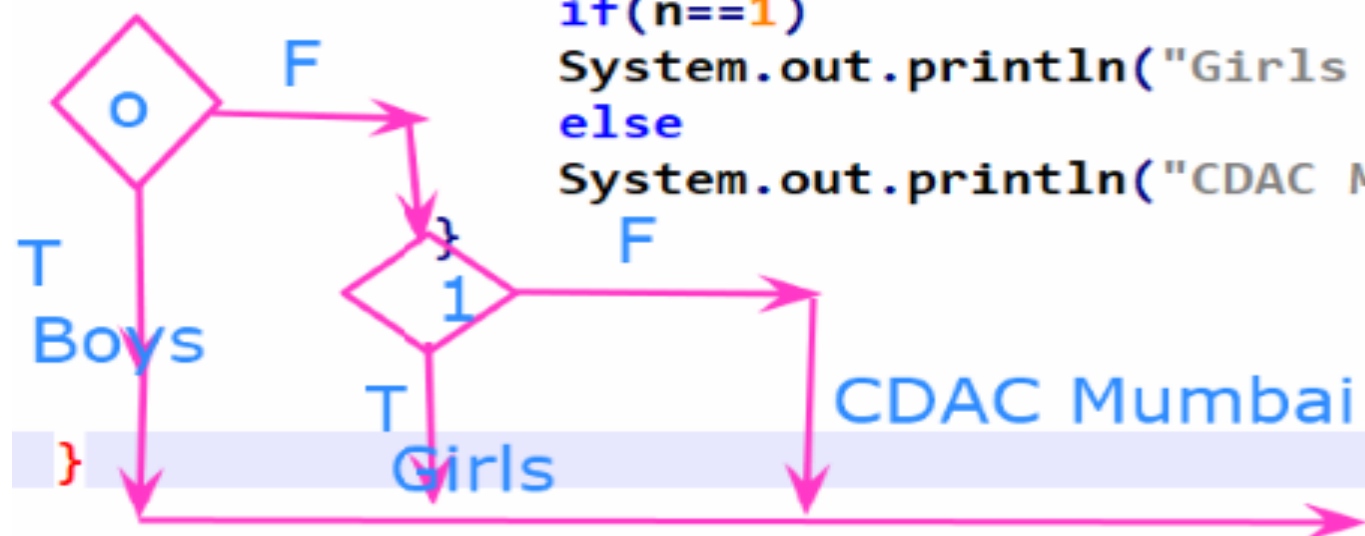


```

public static void main(String args [])
{
    Scanner sc = new Scanner(System.in);
    System.out.println("Enter Number: ");
    int n=sc.nextInt();

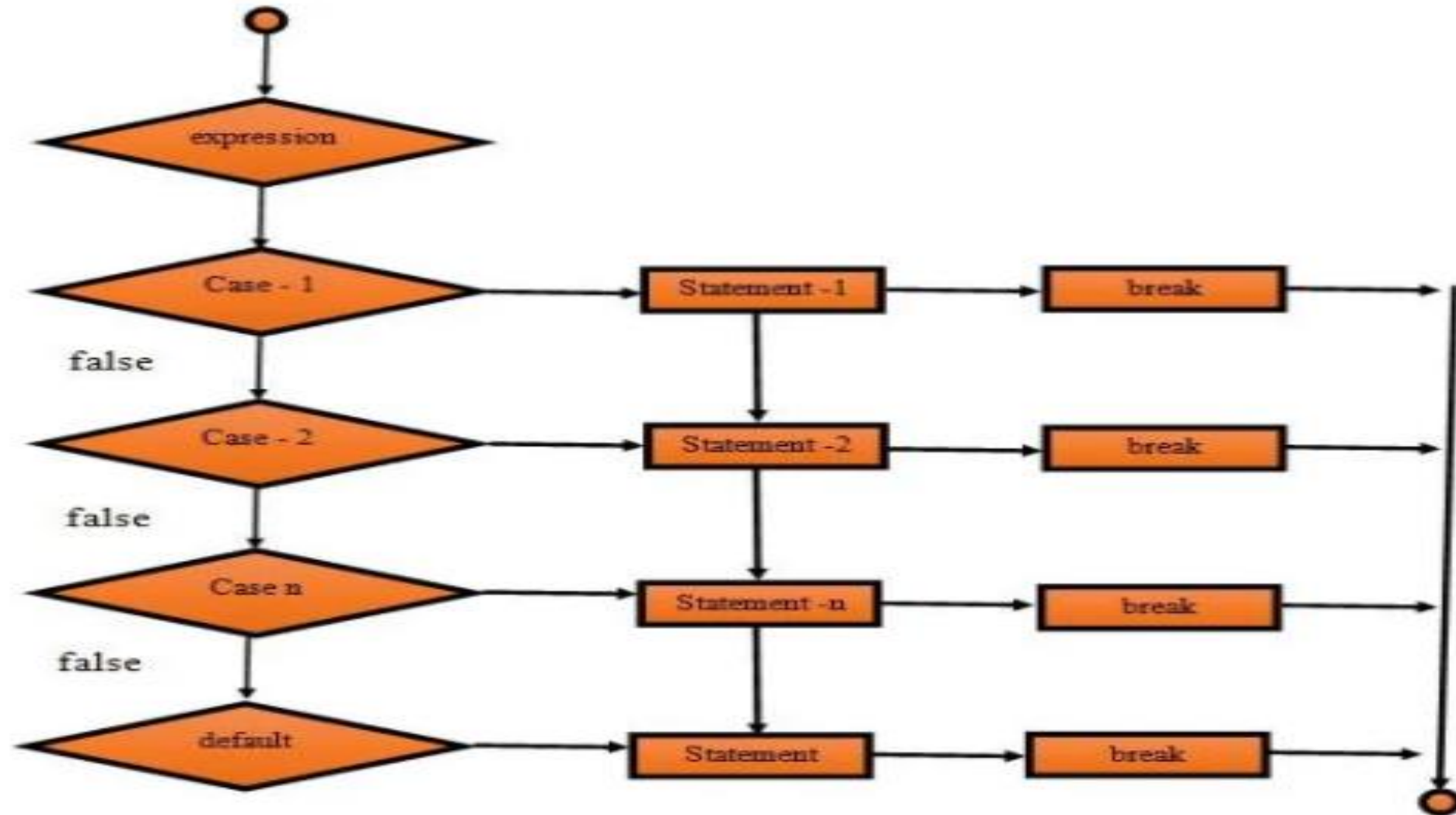
    if(n == 0)// 55 > 65=> incorrect/false/no
    {
        System.out.println("Boys are best!!!");//First Division
    }
    else
    {
        if(n==1)
            System.out.println("Girls are best!!!");
        else
            System.out.println("CDAC Mumbai is best !!!");
    }
}

```





## Data Flow Diagram Of switch Block



```
class Switch
{
    public static void main(String args [])
    {
        int day =3;

        switch(day)
        {
            case 1: System.out.println("Today is Monday");
            case 2: System.out.println("Today is Tuesday");
            case 3: System.out.println("Today is Wednesday");
            case 4: System.out.println("Today is Thursday");
            case 5: System.out.println("Today is Friday");
            case 6: System.out.println("Today is Saturday");
            case 7: System.out.println("Today is Sunday");
            default: System.out.println("Invalid input");
        }
    }
}
```

Who can see what you share here? Recording On

Command Prompt

C:\CDAC22>javac Switch.java

C:\CDAC22>java Switch

Today is Wednesday

Today is Thursday

Today is Friday

Today is Saturday

Today is Sunday

Invalid input

C:\CDAC22>

```
switch(cn)
```

```
{
```

```
case 'a':
```

```
case 'e':
```

```
case 'i':
```

```
case 'o':
```

```
case 'u':
```

```
System.out.println("vowel in lower case");break;
```

```
case 'A':
```

```
case 'E':
```

```
case 'I':
```

```
case 'O':
```

```
case 'U':
```

```
System.out.println("vowel in upper case");break;
```

```
default: System.out.println("not a vowel!!!");
```

```
}
```

```
System.out.println("Cdac Mumbai!!!");
```

```
}
```

```
}
```

Mouse

Select

Text

Draw

Stamp

Spotlight

Eraser

Format

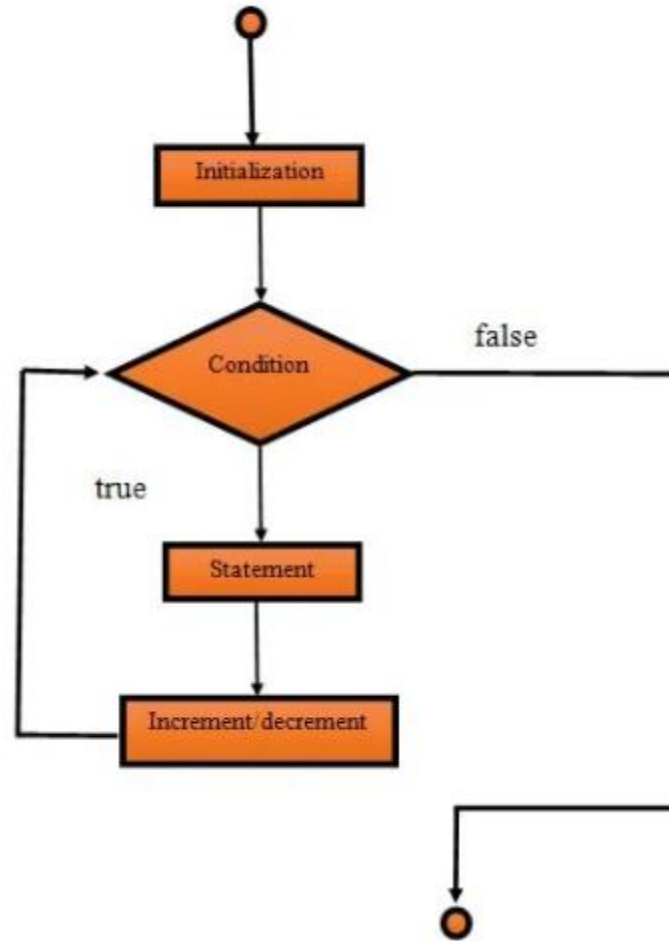
Undo



Who can see what you share here? Recording On

Kiran Wag

## Data Flow Diagram of for loop



```
class forLoop1
{
    public static void main(String a
    {
        for(int i=1;i<5;i++)
        {
            if(i==3)
            {break;}
            System.out.println(i);
        }
    }
}
```

```
C:\CDAC22>java forLoop1
Error: Could not find or load main class forLoop1
Caused by: java.lang.ClassNotFoundException: forLo
```

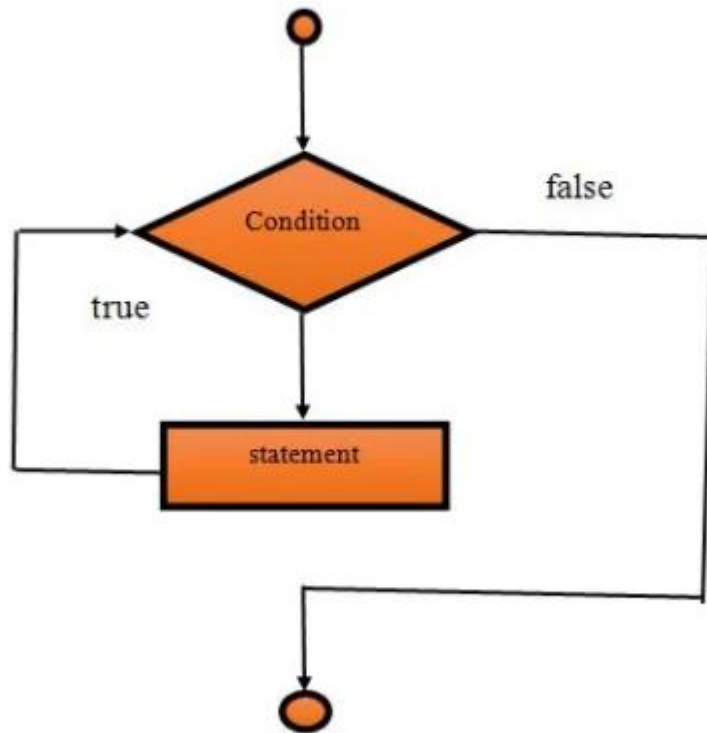
```
C:\CDAC22>javac forLoop1.java
```

```
C:\CDAC22>java forLoop1
```

1  
2

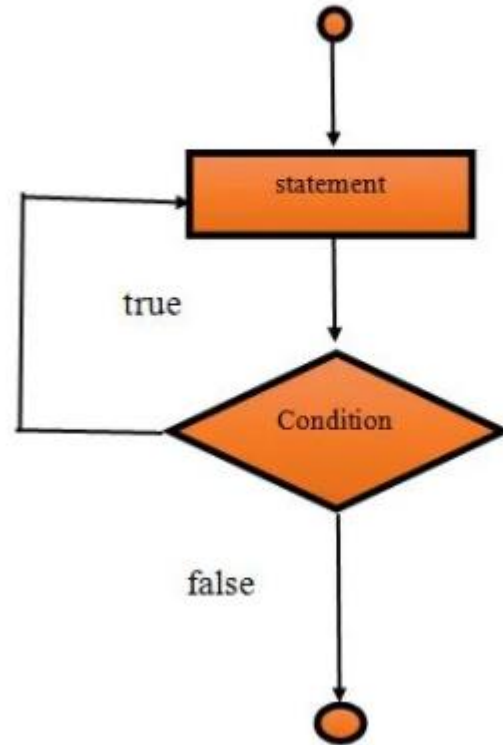
```
C:\CDAC22>
```

## Data-flow-diagram of While Block



```
public class WhileDemo2
{
    public static void main(String[] args)
    {
        while(true)
        {
            System.out.println("infinite while loop");
        }
    }
}
```

## Data Flow Diagram of do-while Block



## Data Flow Diagram of break statement

