

NAME

ADIL AYAZ

I.D

7889

Section

A

Subject

Introduction to Computer  
programming (C++)

Submitted

To:

Engr Ashraf Ali

99 Ra

NATIONAL UNIVERSITY

Question no 2) part A

Page 01

Write a programme for your grading system using "if-else" statement.?

ANSWER:

```
#include <iostream.h>
#include <conio.h>

main()
{
    clrscr();

    int marks;

    cout << "program to find grade" << endl;

    cout << "\nEnter number: ";

    cin >> marks;

    if (marks >= 90 && marks = 100)

    cout << "your Grade is A.";

    else if (marks >= 80 && marks < 90)

    cout << "your Grade is A.";
```

else if (marks >= 70 && marks < 80)

cout << "your Grade is B";

else if (marks >= 60 && marks < 70)

cout << "your Grade is C";

else if (marks >= 50 && marks < 60)

cout << "your Grade is D";

else if (marks >= 0 && mark < 50)

cout << "your Grade is ~~Part~~ F";

else cout << "invalid Marks!"; return D;

}

90	-	-	100	A+
80	-	-	89	A
70	-	-	79	B
60	-	-	69	C
50	-	-	59	D
00	-	-	49	F

Question no 1)  
part B

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Answer: If statement:.

If statement is the most simple decision making statement it is used to decide whether a certain statement or block of statement will be executed or not i.e. if a certain condition is true then a block of statement is executed otherwise not.

If else statement:.

The if statement alone tells us that if a condition is true it will execute a block of statement and if the condition is false it won't. But what if we want to do something else if the condition is false. Here comes the else statement. we can use the else statement with to execute a block of code when the condition is false.



## Question no 2)

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part A

Write a program to display a menu to perform various function by using switch statement.

```
#include <iostream.h>
#include <conio.h>

main ()
{
    clrscr();
    int choice;
    cout << "1: program to input data" << endl;
    cout << "2: program to print data" << endl;
    cout << "3: program to generate report" << endl;
    cout << "4: END" << endl << endl;

    cin >> choice;
    switch (choice)
    {
```

Case 1:

```
cout << "you have selected the first option";  
break;
```

Case 2:

```
cout << "you have to select second option";  
break;
```

Case 3:

```
cout << "you have to select the third option";  
break;
```

Case 4:

```
cout << "you have to select the fourth option";  
break;
```

```
}
```

```
cout << "\n ok";
```

```
getch();
```

```
}
```

# Question no 2)

par b

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Answer: →

↳ Nested IF-ELSE Statement: →

1. It become complicated for multiple section.
2. It use and independent expression for each case.
3. The test condition can be given in a special way of value if the given condition matches then the statement under it will be executed.
4. If the condition in the "if" block is false, the nested else will execute
5. Checks equality and logical expression.

↳ Switch Statement: →

1. It is easy to understand for multiple selection

- 2. It uses a single expression for all cases, but each case must have a constant value of integer type or character type.
- 3. Only a single expression is given in the switch statement which returns a single value. The test condition cannot be given in a specific range. It is a drawback.
- 4. If there is no matching case statement, the control will pass to the first line after the switch.
- 5. Check quality.



ANSWER ⇒

### "Relational Operator"

\* In Computer Science, a relational Operator is a programming language construct or operator that test or define some kind of relation between two entities.

\* A Relational Operator compare two values.

\* Value can be any built-in C++ data.

\* The comparison involves such relationship is equal to, less than and greater than.

\* The result of the comparison is either true or false.

←: Relational Expression →

\* It evaluate to the integer value  
1 (true) or 0 (false)

\* All these operators are called binary operators because they take two expressions as operands.

\* Relational operator (==) is used to compare two values whether they are equal or not.

\* If both values are equal, output is displayed as "value are equal". Else, output is displayed as "value are not equal".

\* Double equal sign (==) should be used to compare two values. We should not use single equal sign.

\* A relation expression is a test between two or more statements. If the test passes, then the result is true. Otherwise it is false.

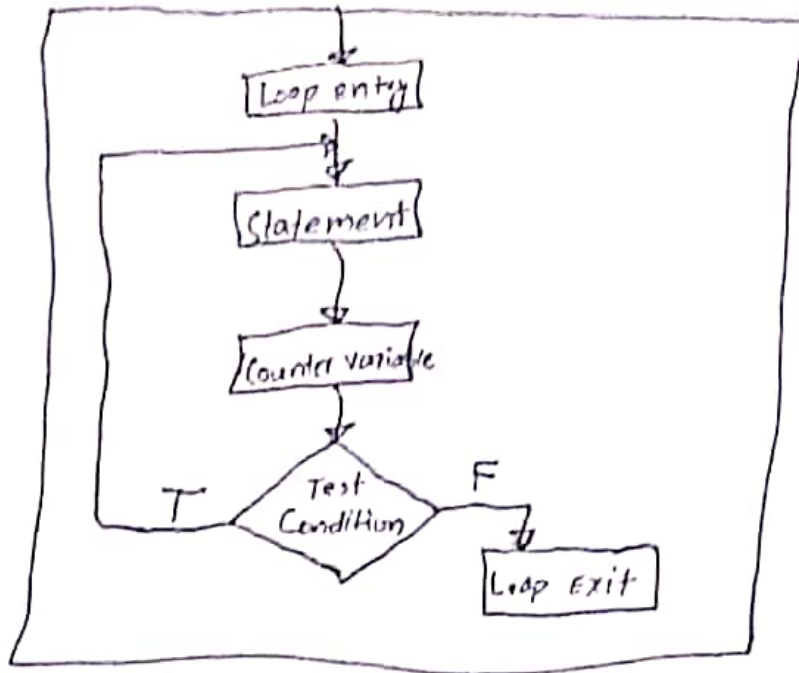
# Question no 3)

Part B

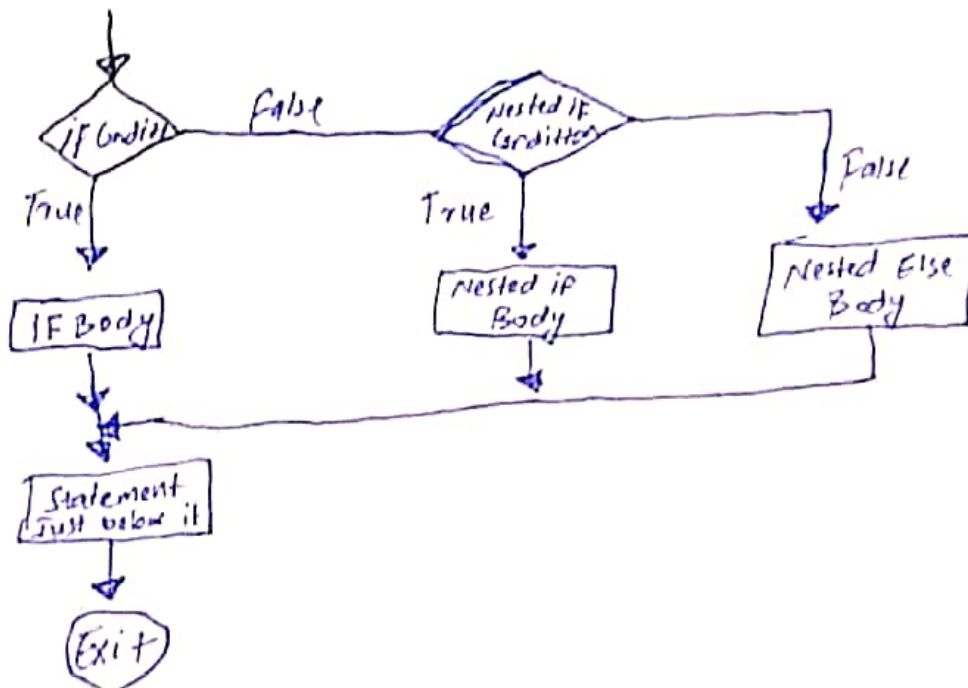
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ANSWER :-

Flow chat for while loop :-



Flow chat for Nested if statement :-



Question no 4)

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part A

Write a programme in C++ to find the volume of the cylinder.

```
#include <iostream.h>
```

```
#include <conio.h>
```

```
main ( )
```

```
{
```

```
clrscr();
```

```
float radius, height, volume;
```

```
cout << "Enter the radius=";
```

```
cin >> radius;
```

```
cout << "Enter the height=";
```

```
cin >> height;
```

```
volume
```

```
cout << "volume of the cylinder=" << volume;
```

```
getch;
```

```
}
```



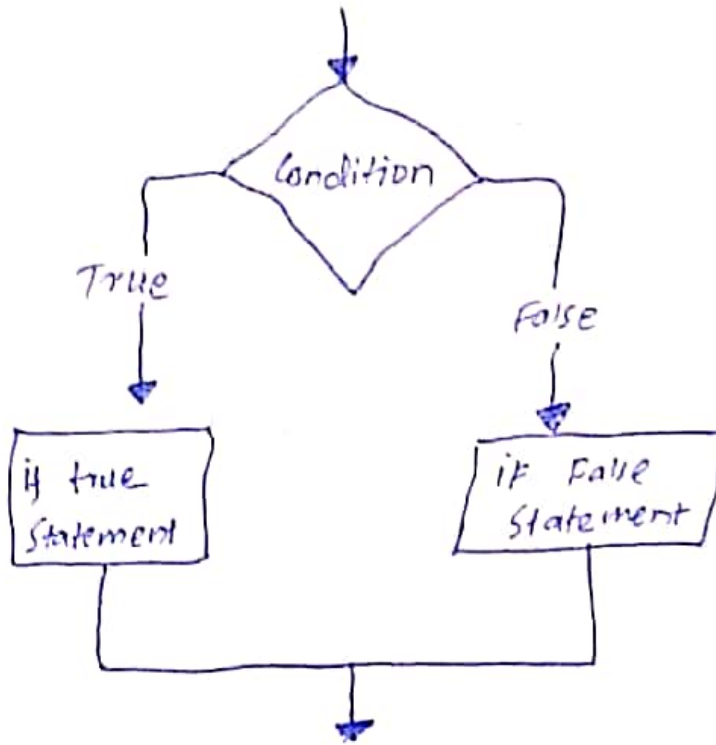
# Question NO 4)

part B

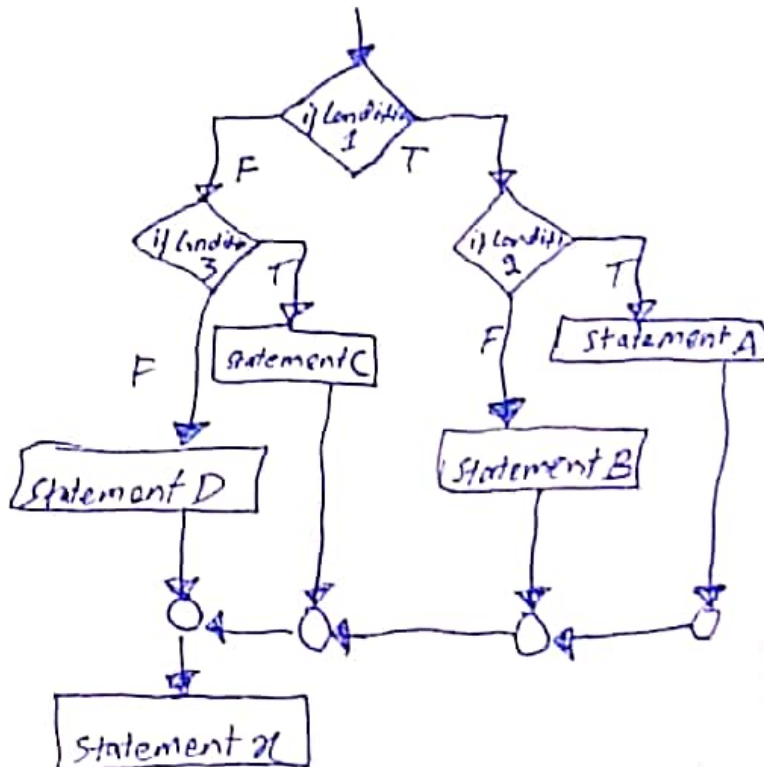
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Answer :->

Flow chat For "if" statement:



Flow chat for "if-else" statement:



Answer's

• Sequential Statement:→

Sequential Statement are assignment Statement that Assign value to variable and signal flow control system that conditionally execute system. (if and else).

To familiarise yourself with Sequential Statement consider the following:

Assignment Statement.

Variable assignment Statement.

Signal assignment Statement.

if statement.

Case Statement.

loop Statement.

Next Statement.

Exit Statement.

Question no 5)  
part B

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Write a programme which perform  
arithmetic operation by using all  
arithmetic operation.

```
#include <iostream.h>
```

```
#include <conio.h>
```

```
main ( )
```

```
{
```

```
clrscr ( );
```

```
int addition, subtraction, multiplication, division;
```

```
float remainder;
```

```
addition = 5 + 2;
```

```
subtraction = 5 - 2;
```

```
multiplication = 5 * 2;
```

```
division = 5 / 2;
```

```
remainder = 5 % 2;
```

```
cout << " Addition of 5 and 2 = " << addition << endl;
```

cout << "Subtraction of 5 + 2 = " << subtraction << endl;

cout << "multiplication of 5 + 2 = " << multiplication << endl;

cout << "division of 5 + 2 = " << division << endl;

cout << "remainder of 5 + 2 = " << remainder;

}

THE  
END

THANK YOU.