Q No1 (a)

Ans:-

```
#include<iostream.h>
using namespace std;
Int main();
cout <<" program to fixed
Grades "<<endl;
cout <<" Enter marks:;
cin >> marks;
if (marks >= 87 88 marks<= 100)
count your grade is A" ; else
if marks >= 87 88 marks
<98) cout <<" Your grade is A";
else if( marks >= 82 88marks <86)
cout <<" your grade is B" ;
else if(marks: 78 88 marks<81)
cout <<" your grade is B" ;
else if( marks >= 67 88 marks
<75) cout <<your grade
is c+ " ;
else if (marks = 60 88 mark
&66) cout <<" your grade
is (" ;
```

else cout << "Invalid marks";
return 0;

Q No 1 Part b

Ans:- If Statement:- Some time we want to selectively excute block of code.

=> The c++ syntax of the if statement is;

```
if
{
  "Block of code to excute if expression is true
}
```

=> When expression is true block of code is executed.

=> when expression is false The block of code should be indented 3-4 spaces to add paroStam readability. If the block code

is only one line long the { } brackets can be omitted.

if else statement:- Sometimes we need ~~two~~ to handle two alternative in our code

=> In this statement one condition and blocks are given,

Either one of two statements. is executing after evaluating of the condition is false the first block of statement is ignored and statement.

is used for making second block following two else is executed

=> it is also known as "Double blocked conditional statement"—

Q#02 PART (A)

Answer::

```
#Include<iostream>
Int main (void)
  {
  Char Selections;
  Cout <<"In Menu" ;
  Cout <<" In ==== =" ;
  Cout <<" InA - Append" ;
  Cout <<" InM _Modify" ;
  Cout <<" In D - Delete" ;
  Cout <<"In Enter selection :" ;
  // read the Input
    Cin >> selection
Switch (selection)
{
 case 'A';
 case 'a': {cout <<" In To
append a record \n" ; }
 break
 case 'M';
```

```
case 'm': { cout << "\n to
    modify a record" }
  break
break;
case 'D' :
case 'd' : {cout << "\n To delete
    a record"; }

  break
  case 'X';
  case 'X' : {cout << "\n To
    exit the menu"; }

  break
// other than A, M, D, and
   X ....
default : cout << "\n Invalid
    section";
// no break in the
  default case
  }
  cout << "\n";
  return 0;
  }
```

QNO2:- (PART B)

Difference B/W "Nested -IF-ELSE" AND "SWITCH" STATEMENTS.

Answer:-

"Nested IF-ELSE STATEMENT":-

1:- it becomes complicated for multiple selections

ii) it uses an independent expression for each case

iii) The test condition can be given in a special range of value if the given condition matches then the statements under it will be executed.

"SWITCH STATEMENT":-

i) it easy to understand for multiple selections

ii) it uses a single expression for all cases but each case must have a constant value of integer type or character type.

(iii) only a single expression is given in the switch statement which returns a single value. The test condition cannot be given in a specified range. it is drawback.

QNo3:- PART (A)

Differentiate b/w "Relational operators" and "Relational Expression".

Answer:- The relational operator apply is relation to opersands and returns a logical value of true or false. The resulting logical value can be used as predicate in IF, WHILE, or REPEAT Statement. You can also Combine Boolen operator with other logical value to make more complex expression. for example EQ equal to, it returns true if it operator operands are equal; otherwise, it returns false.

"Relational expression:-

C++

like relational expression are defined for use as arguments to procedures for use with Conditional expressions. The relational

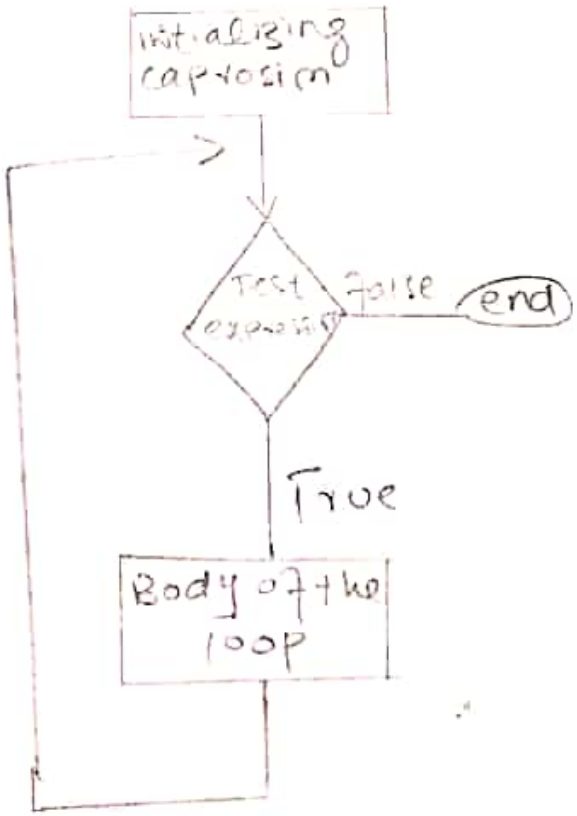
Operations are "==" <true> if the expression are equal
"!=" , <true> if the expression are not equal.
">" , <true> if the LHE is greater the RHE.

Q No 03 :- (10) (PART B)

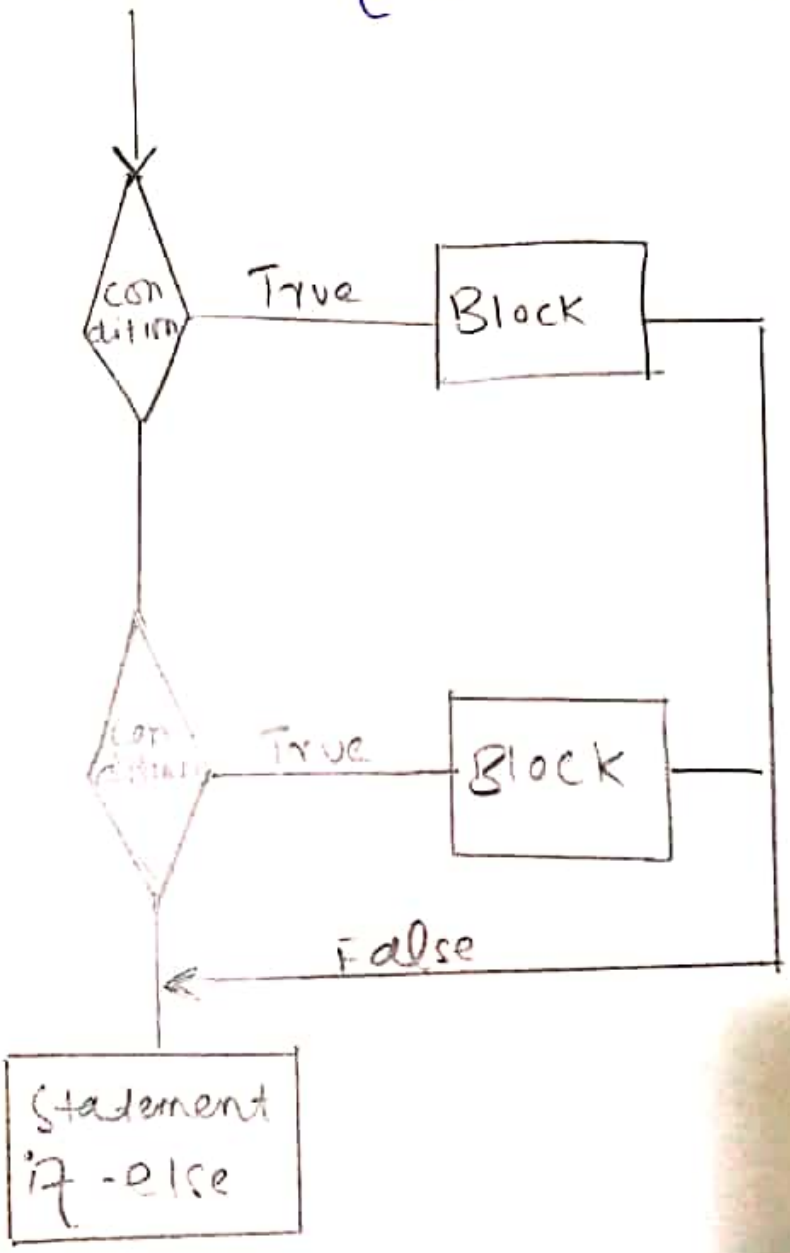
Draw the flow chart for "while loop" and "Nested if Statement".

Answer :-

Flow chart of while loop :-



Nested if Statement:-



Q.No 4 (PART A) :-

Write a parogram in C++ to calculate the volume of a cylinder.

Answer :-

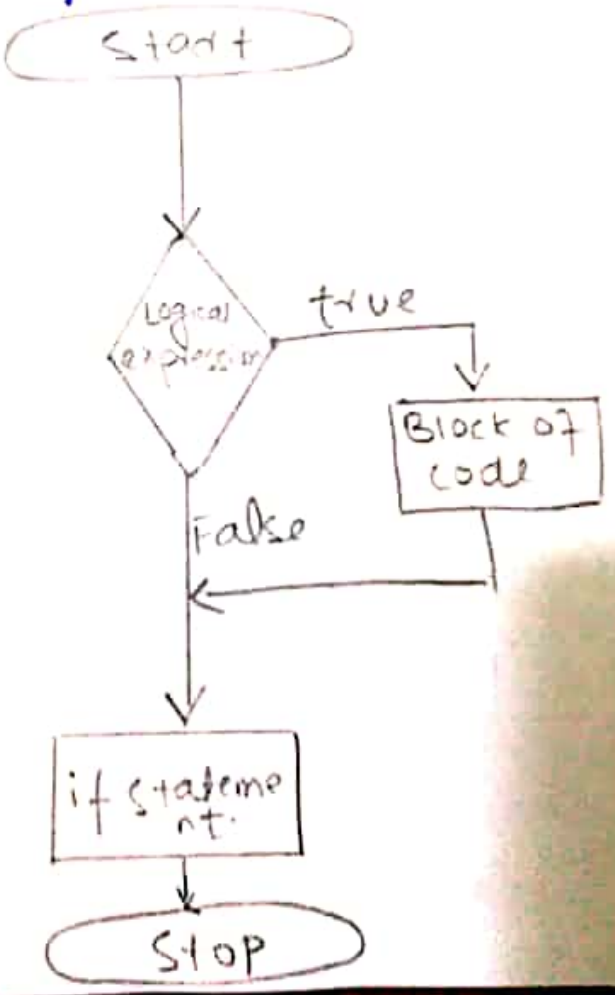
```
#Include <iostream>
using namespace std;
    int main()
      {
int rad1, hgt;
 float volcy;
 cout << "\n\n calculate the
volume of a cylinder:\n";
 cout <<"----------\n";
 cout <<" Input the radius
of the cylinder: ";
cin >> rad1;
cout <<" Input the height
of the cylender: ";
cin >> hgt;
```

```
volcy = (3.14 * rad1 * hgt);
cout << " The volume of a
cylender is : " << volcy << endl;
cout << endl;
```

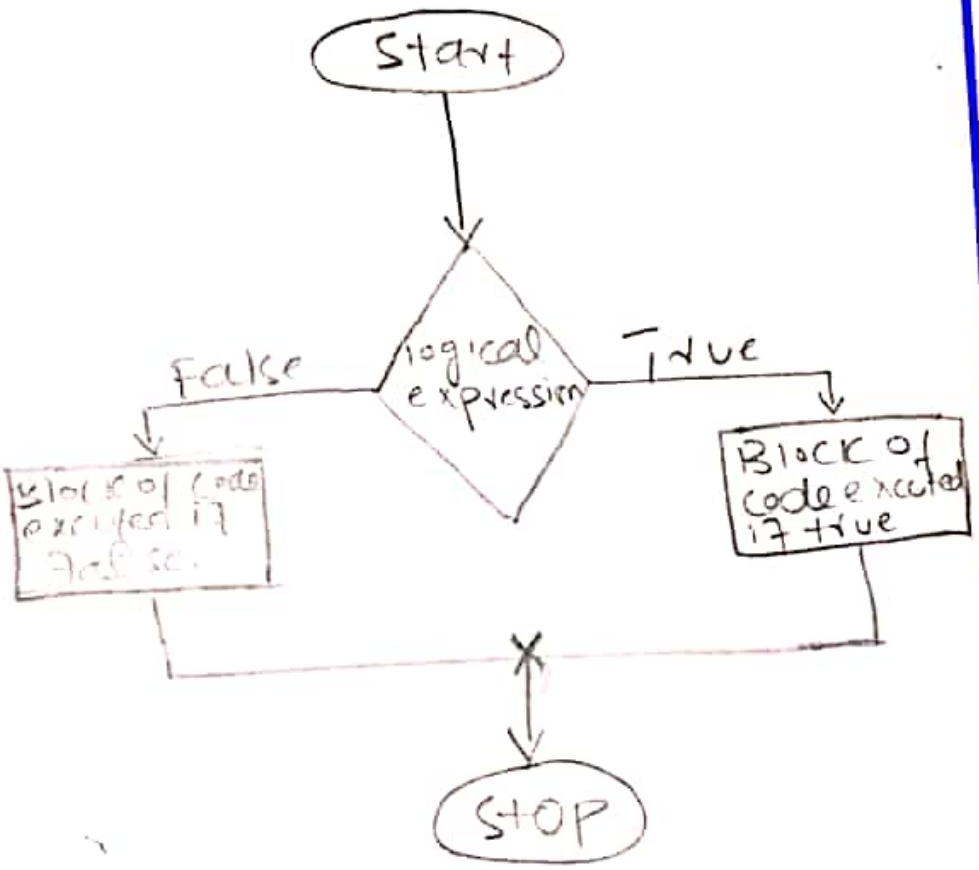
QNO4 PART(B)

Draw flow chart for "if" statement and "if-else" statement.

Answer: if statement:-



if else statement:-



Q.No 5 : PART (A)

What is Sequential Statement ?

Answer:- Sequence of Statement are written in also order to accomplish a specific activity. So Statement are exuted in the order they are specified in the program. This way of the executing Statement. There is the advantage that is no Seprate Control Statements are needed in order to execute the Statements. one after the other Disadvantage is that there is no way to change Sequence.

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Q No5 part (b)

Answer:-

```
#include <iostream>
using name space std;
int main ()
{
int Num1, Num2;
cout << " Enter two numbers
to operated with arithmetic
operators: ";
cin >> Num2;
cout << endl;
cout << " Num1+Num2 = " << Num1
+ Num2 << endl;

cout << " Num1 X Num2 = " Num1 x Num2
Num2 << endl;
cout << " Num1-Num2 = " << Num1
- Num2 << end1;

if (Num 2 != 0)
cout << " Num1/Num2
=" << Num1/Num2 << end;
```

```
else
    cout << " Num2 is not
zero    divisim not define !" <<
                        end ;

return 0 ;
}
```