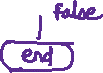
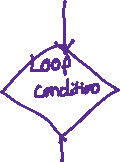
**do while Loop**

The do…while loop executes block of statements inside loop body first and then test the condition for next iteration and executes next only if condition is true. The do…while loop is much similar to C++ while loop with one major difference, in do…while loop block of statements inside loop body executes at least once.

**do while Loop Flow Diagram**



Syntax:-

do{

// loop body

} while(condition);

Here, loop executes block of statements inside loop body first and then test the condition provided along with while keyword for next iteration and executes next only if condition is true. Condition is a Boolean expression that results in either True or False, if it results in True then statements inside loop body are executed and condition is evaluated again. This process is repeated until the condition is evaluated to False. If the condition results in False then loop is terminated and control is transferred to next statement.

Example:-

#include<iostream>

#include<math.h> //sqrt function

#include<process.h> //for exit function

using namespace std;

main()

{

char ch,ch1;

float l,b,perimeter,area,diag;

cout<<"\nRectangle Menu";

cout<<"\n 1. Area";

cout<<"\n 2. Perimeter";

cout<<"\n 3. Diagonal";

cout<<"\n 4. Exit"<<"\n";

cout<<"Enter your choice:";

do{

cin>>ch;

if(ch=='1' || ch=='2' || ch=='3')

{

cout<<"Enter length and breadth";

cin>>l>>b;

}

switch(ch)

{

case '1': area=l\*b;

cout<<"Area="<<area;

break;

case '2': perimeter=2\*(l+b);

cout<<"Perimeter="<<perimeter;

break;

case '3': diag=sqrt((l\*l + b\*b));

cout<<"Diagonal="<<diag;

break;

case '4': cout<<"Breaking";

exit(0);

default:cout<<"Wrong Choice";

cout<<"Enter a valid one";

break;

}//end of switch

cout<<"\n Do you want to enter more(y/n)";

cin>>ch1;

if(ch1=='y'||ch1=='Y')

cout<<"Again enter choice(1-4):";

}while(ch1=='y'|| ch1=='Y');//end of do while loop

return 0;

}