a = 10;

% check the condition using if statement

if a < 20

% if condition is true then print the following

fprintf('a is less than 20\n' );

end

fprintf('value of a is : %d\n', a);

a = 100;

% check the boolean condition

if a < 20

% if condition is true then print the following

fprintf('a is less than 20\n' );

else

% if condition is false then print the following

fprintf('a is not less than 20\n' );

end

fprintf('value of a is : %d\n', a);

a = 100;

%check the boolean condition

if a == 10

% if condition is true then print the following

fprintf('Value of a is 10\n' );

elseif( a == 20 )

% if else if condition is true

fprintf('Value of a is 20\n' );

elseif a == 30

% if else if condition is true

fprintf('Value of a is 30\n' );

else

% if none of the conditions is true '

fprintf('None of the values are matching\n');

fprintf('Exact value of a is: %d\n', a );

end

grade = 'B';

switch(grade)

case 'A'

fprintf('Excellent!\n' );

case 'B'

fprintf('Well done\n' );

case 'C'

fprintf('Well done\n' );

case 'D'

fprintf('You passed\n' );

case 'F'

fprintf('Better try again\n' );

otherwise

fprintf('Invalid grade\n' );

end

switch(ch1)

case 'A'

fprintf('This A is part of outer switch');

switch(ch2)

case 'A'

fprintf('This A is part of inner switch' );

case 'B'

fprintf('This B is part of inner switch' );

end

case 'B'

fprintf('This B is part of outer switch' );

end

a = 100;

b = 200;

switch(a)

case 100

fprintf('This is part of outer switch %d\n', a );

switch(b)

case 200

fprintf('This is part of inner switch %d\n', a );

end

end

fprintf('Exact value of a is : %d\n', a );

fprintf('Exact value of b is : %d\n', b );

a = 10;

% while loop execution

while( a < 20 )

fprintf('value of a: %d\n', a);

a = a + 1;

end

for a = 10:20

fprintf('value of a: %d\n', a);

end

for a = 1.0: -0.1: 0.0

disp(a)

end

for a = [24,18,17,23,28]

disp(a)

end

for i = 2:100

for j = 2:100

if(~mod(i,j))

break; % if factor found, not prime

end

end

if(j > (i/j))

fprintf('%d is prime\n', i);

end

end

a = 10;

% while loop execution

while (a < 20 )

fprintf('value of a: %d\n', a);

a = a + 1;

if( a > 15)

% terminate the loop using break statement

break;

end

end

a = 9;

%while loop execution

while a < 20

a = a + 1;

if a == 15

% skip the iteration

continue;

end

fprintf('value of a: %d\n', a);

end