Example program of if statement

/\*\*

\* C program to check if a person is eligible to vote or not.

\*/

#include <stdio.h>

int main()

{

/\* Variable declaration to store age \*/

int age;

/\* Input age from user \*/

printf("Enter your age: ");

scanf("%d", &age);

/\* Use relational operator to check age \*/

if(age >= 18)

{

/\* If age is greater than or equal 18 years \*/

printf("You are eligible to vote in India.");

}

return 0;

}

Example of if...else statement

/\*\*

\* C program to find maximum between two numbers

\*/

#include <stdio.h>

int main()

{

/\* Declare two integer variables \*/

int num1, num2;

/\* Input two number from user \*/

printf("Enter two numbers: ");

scanf("%d%d", &num1, &num2);

/\* Compare both number using relational operator \*/

if(num1 > num2)

{

/\* If first number is greater than second \*/

printf("First number is maximum.");

}

else

{

/\* If first number is not greater than second \*/

printf("Second number is maximum.");

}

return 0;

}

Example of ladder if...else...if statement

/\*\*

\* C program to check negative, zero or positive.

\*/

#include <stdio.h>

int main()

{

/\* Declare integer variable \*/

int num;

/\* Input an integer from user \*/

printf("Enter any number: ");

scanf("%d", &num);

if(num < 0)

{

/\* If number is less than zero, then it is negative \*/

printf("NUMBER IS NEGATIVE.");

}

else if(num == 0)

{

/\* If number equal to 0, then it is zero \*/

printf("NUMBER IS ZERO.");

}

else

{

/\* If number is greater then zero, then it is positive \*/

printf("NUMBER IS POSITIVE.");

}

return 0;

}

Example program of nested if...else statement

/\*\*

\* C program to find maximum between three numbers

\*/

#include <stdio.h>

int main()

{

/\* Declare three integer variables \*/

int num1, num2, num3;

/\* Input three numbers from user \*/

printf("Enter three numbers: ");

scanf("%d%d%d", &num1, &num2, &num3);

if(num1 > num2)

{

if(num1 > num3)

{

/\* If num1>num2 and num1>num3 \*/

printf("Num1 is max.");

}

else

{

/\* If num1>num2 but num1<num3 \*/

printf("Num3 is max.");

}

}

else

{

if(num2 > num3)

{

/\* If num1<num2 and num2>num3 \*/

printf("Num2 is max.");

}

else

{

/\* If num1<num2 and num2<num3 \*/

printf("Num3 is max.");

}

}

return 0;

}

Example program of switch...case statement

/\*\*

\* C program to print day of week name

\*/

#include <stdio.h>

int main()

{

/\* Declare integer variable to store week number \*/

int week;

/\* Input week number from user \*/

printf("Enter week number (1-7): ");

scanf("%d", &week);

switch(week)

{

case 1:

/\* If week == 1 \*/

printf("Its Monday.\n");

printf("Its a busy day.");

break;

case 2:

/\* If week == 2 \*/

printf("Its Tuesday.");

break;

case 3:

/\* If week == 3 \*/

printf("Its Wednesday.");

break;

case 4:

/\* If week == 4 \*/

printf("Its Thursday.\n");

printf("Feeling bit relaxed.");

break;

case 5:

/\* If week == 5 \*/

printf("Its Friday.");

break;

case 6:

/\* If week == 6 \*/

printf("Its Saturday.\n");

printf("It is weekend.");

break;

case 7:

/\* If week == 7 \*/

printf("Its Sunday.\n");

printf("Hurray! Its holiday.");

break;

default:

/\* If week < 1 or week > 7 \*/

printf("Um! Please enter week number between 1-7.");

}

return 0;

}

Example program to demonstrate while loop

/\*\*

\* C program to print natural numbers using while loop

\*/

#include <stdio.h>

int main()

{

/\* Loop counter variable declaration and initialization\*/

int n = 1;

/\* Loop condition \*/

while(n <= 10)

{

/\* Body of loop \*/

printf("%d ", n);

/\* Update loop counter variable \*/

n++;

}

return 0;

}

Example program to demonstrate do...whileloop

/\*\*

\* C program to print natural numbers using do while loop

\*/

#include <stdio.h>

int main()

{

/\* Loop counter variable declaration \*/

int n=1;

do

{

/\* Body of loop \*/

printf("%d ", n);

/\* Update loop counter variable \*/

n++;

} while(n <= 10); /\* Loop condition \*/

return 0;

}

Example program to demonstrate for loop

/\*\*

\* C program to print natural numbers from 1 to 10.

\*/

#include <stdio.h>

int main()

{

/\* Declare loop counter variable \*/

int count;

/\* Run a loop from 1 to 10 \*/

for(count=1; count<=10; count++)

{

/\* Print current value of count \*/

printf("%d ", count);

}

return 0;

}

Example program to demonstrate nested loop

/\*\*

\* C program to print multiplication table from 1 to 5

\*/

#include <stdio.h>

int main()

{

/\* Loop counter variable declaration \*/

int i, j;

/\* Outer loop \*/

for(i=1; i<=10; i++)

{

/\* Inner loop \*/

for(j=1; j<=5; j++)

{

printf("%d\t", (i\*j));

}

/\* Print a new line \*/

printf("\n");

}

return 0;

}

Example program to demonstrate breakstatement

/\*\*

\* C program to check prime number

\*/

#include <stdio.h>

int main()

{

/\* Variable declarations \*/

int num, isPrime, i;

/\* Input number from user \*/

printf("Enter any number: ");

scanf("%d", &num);

/\* Initially assume that the number is prime \*/

isPrime = 1;

for(i=2; i<num; i++)

{

/\*

\* If number is divided by any number

\* between 2 to n. Then the given number

\* is not prime.

\*/

if(num % i == 0)

{

/\*

\* Number is not prime.

\* Hence, set prime as 0

\*/

isPrime = 0;

/\*

\* Number is not prime, no need to check further.

\* Hence terminate from loop.

\* Using break here will terminate from loop not from if

\*/

break;

}

}

/\* Check the prime flag value \*/

if(isPrime == 1)

{

printf("Number is prime number.");

}

else

{

printf("Number is composite number.");

}

return 0;

}

Example program to demonstrate continuestatement

/\*\*

\* C program to print even numbers between 1 to 100

\*/

#include <stdio.h>

int main()

{

/\* Variable declaration \*/

int num;

printf("Even numbers between 1 to 100: \n");

for(num=1; num<=100; num++)

{

/\*

\* If num is odd then

\* skip rest loop body and

\* continue to next iteration

\*/

if(num % 2 == 1)

continue;

/\* Print even number \*/

printf("%d ", num);

}

return 0;

}

Example program to demonstrate gotostatement

/\*\*

\* C program to demonstrate usage of goto

\*/

#include <stdio.h>

int main()

{

/\* Variable declaration \*/

int i, j, k;

/\* Some sample loop \*/

for(i=1; i<=10; i++)

{

for(j=1; j<=10; j++)

{

k = 1;

while(k<=10)

{

/\* Some condition \*/

if(j==5 && k==5)

{

/\* Move the program control outside the loop \*/

goto out\_of\_loop;

}

printf("%d ", k);

k++;

}

}

}

/\* goto label \*/

out\_of\_loop:

return 0;

}