

WELCOME

We are group
10



Meet the Group

**MD MAHFUZ
RAHMAN
NIROB**

221-35-981

**MD
RUFSANJANI
SHANTO**

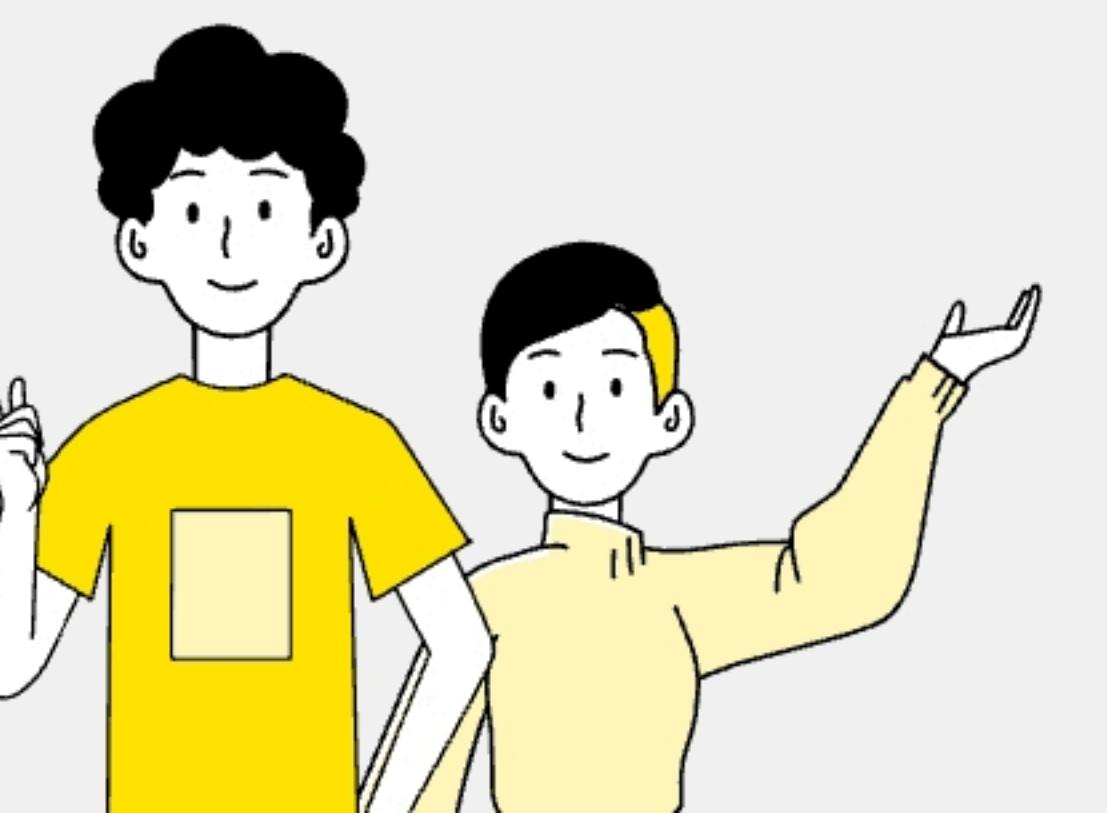
221-35-1064

**NAZMUL
HOSSAN**

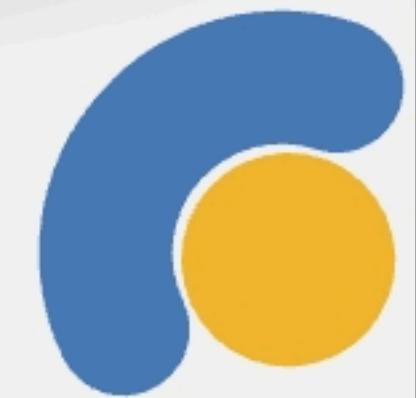
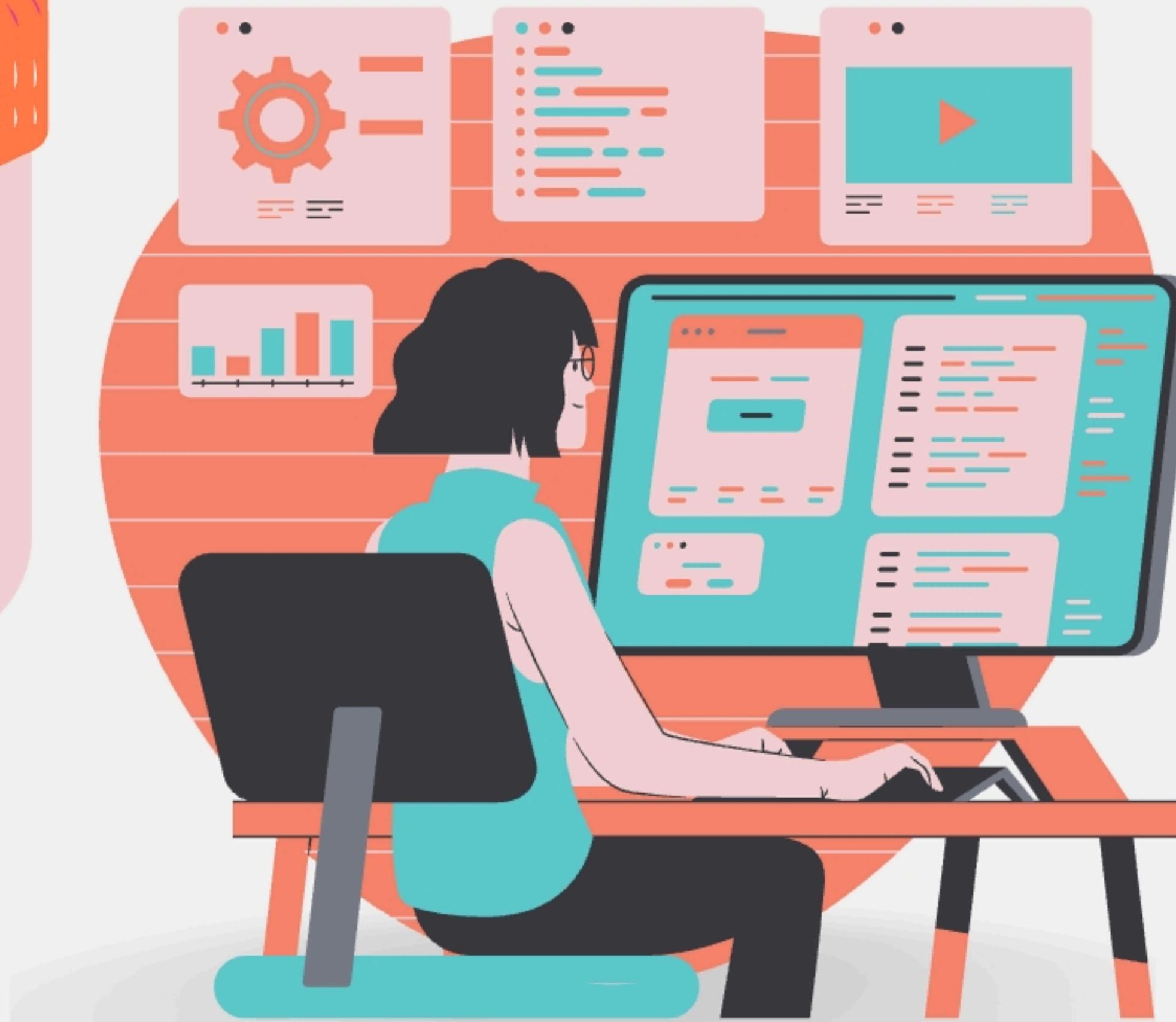
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**RAZIN
SALEH**

221-35-1055



DECISION MAKING AND LOOPING (WHILE+DO... WHILE+FOR)

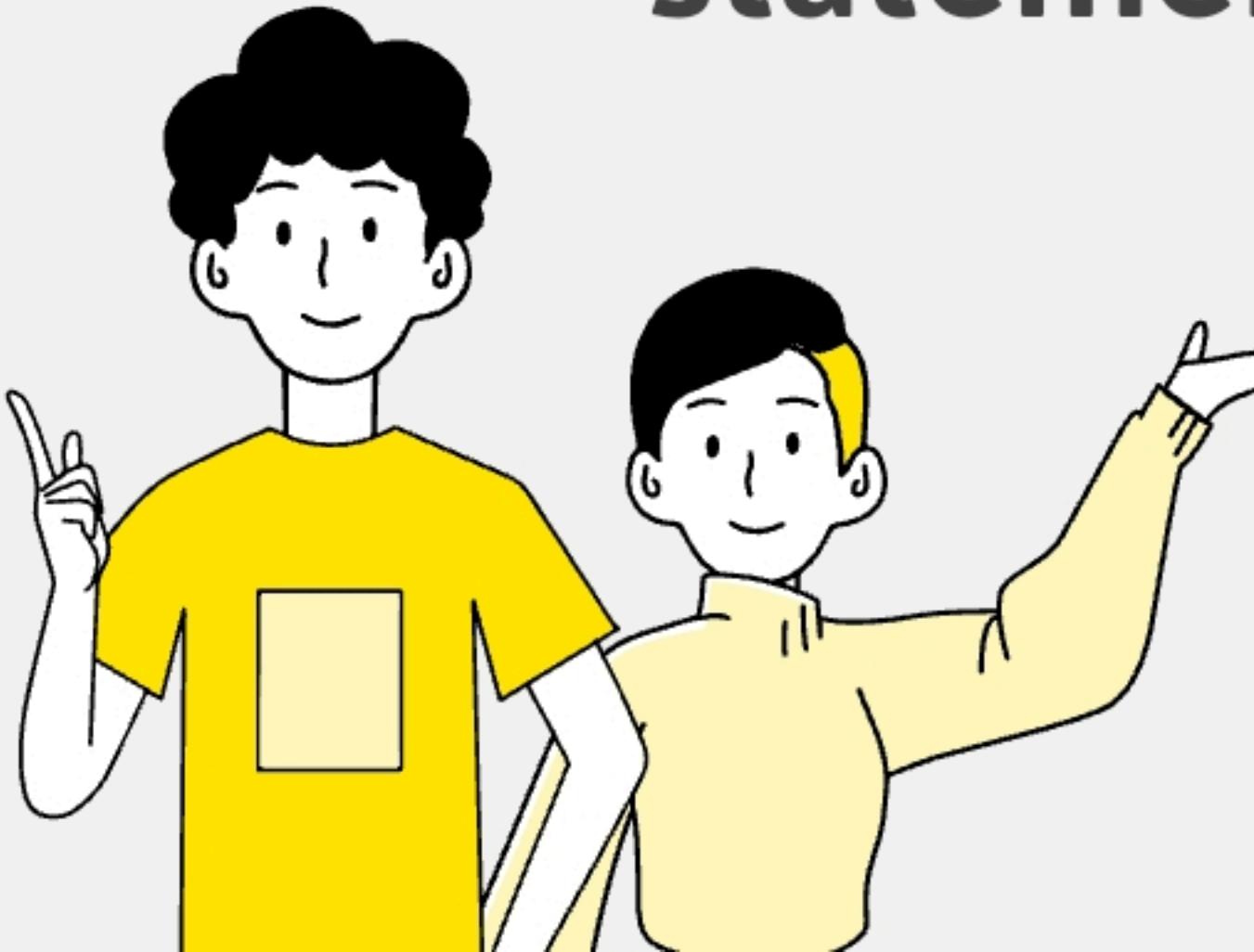




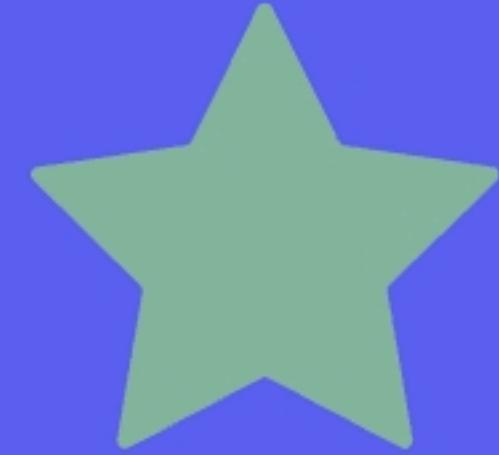
Loop



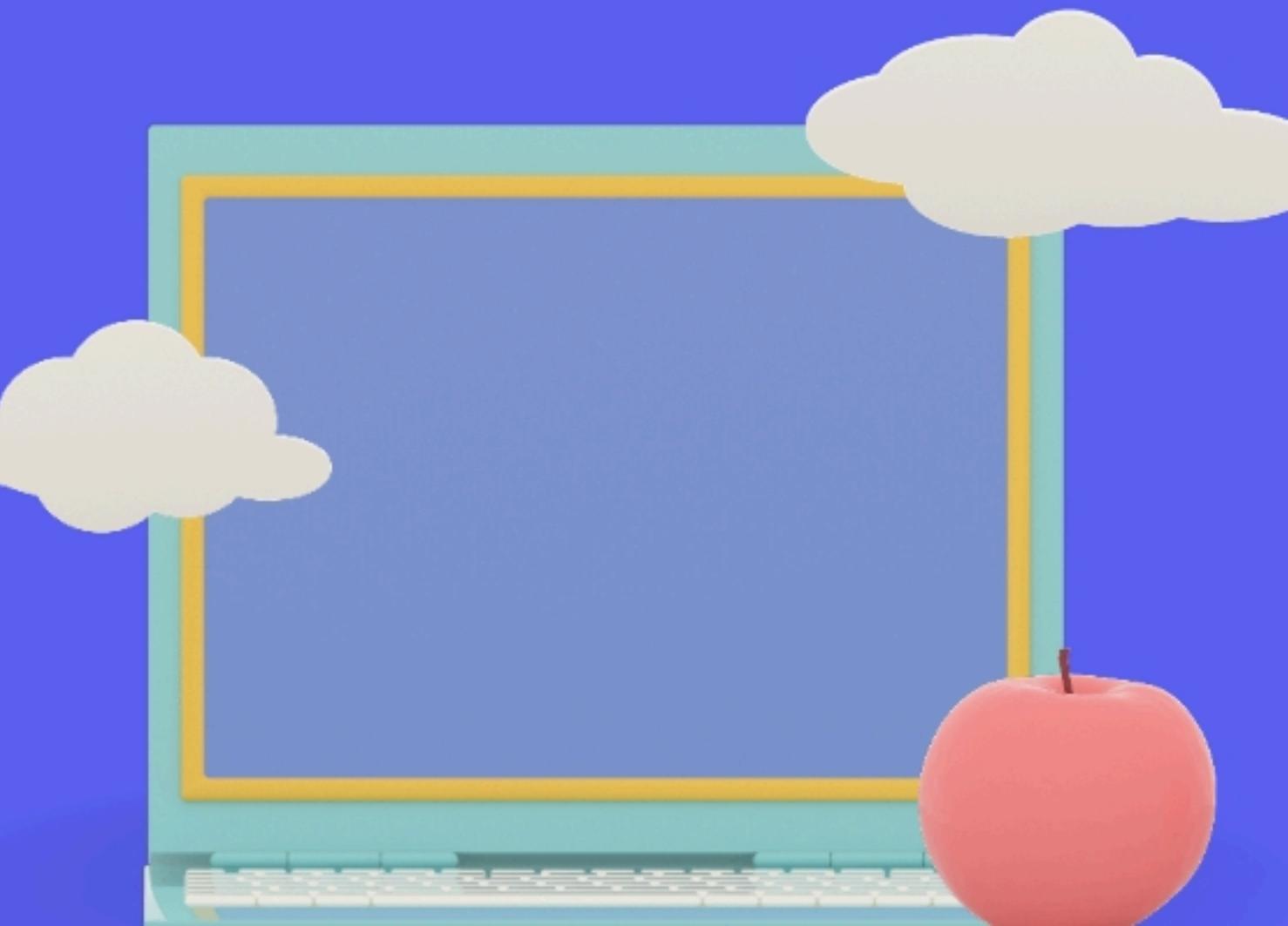
- **Looping Statements in C** execute the sequence of statements many times until the stated condition becomes false. A loop in C consists of two parts, a **body of a loop** and a **control statement**.



LOOP IN PROGRAMMING



- In programming, sometimes there is a need to perform some operation more than once or (say) n number of times. Loops come into use when we need to repeatedly execute a block of statements.





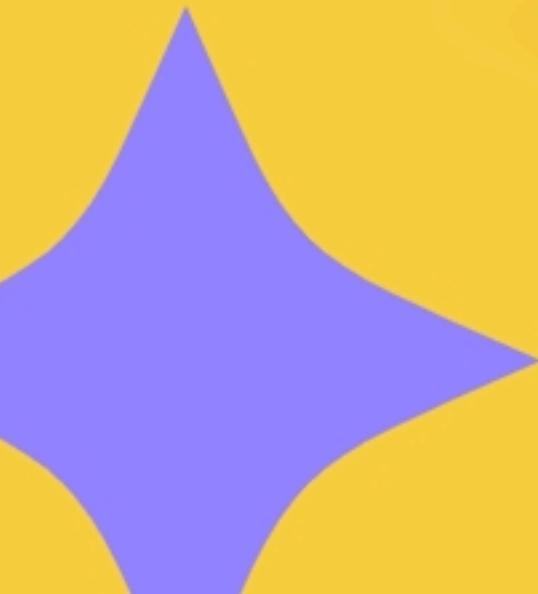
TYPES OF LOOP IN C

1. Entry control loop

- For Loop
- While Loop

2. Exit control loop

- Do While Loop



for loop

- The traditional for loop found in C requires 3 parts :
 - 1) Initialization
 - 2) Condition
 - 3) Increment

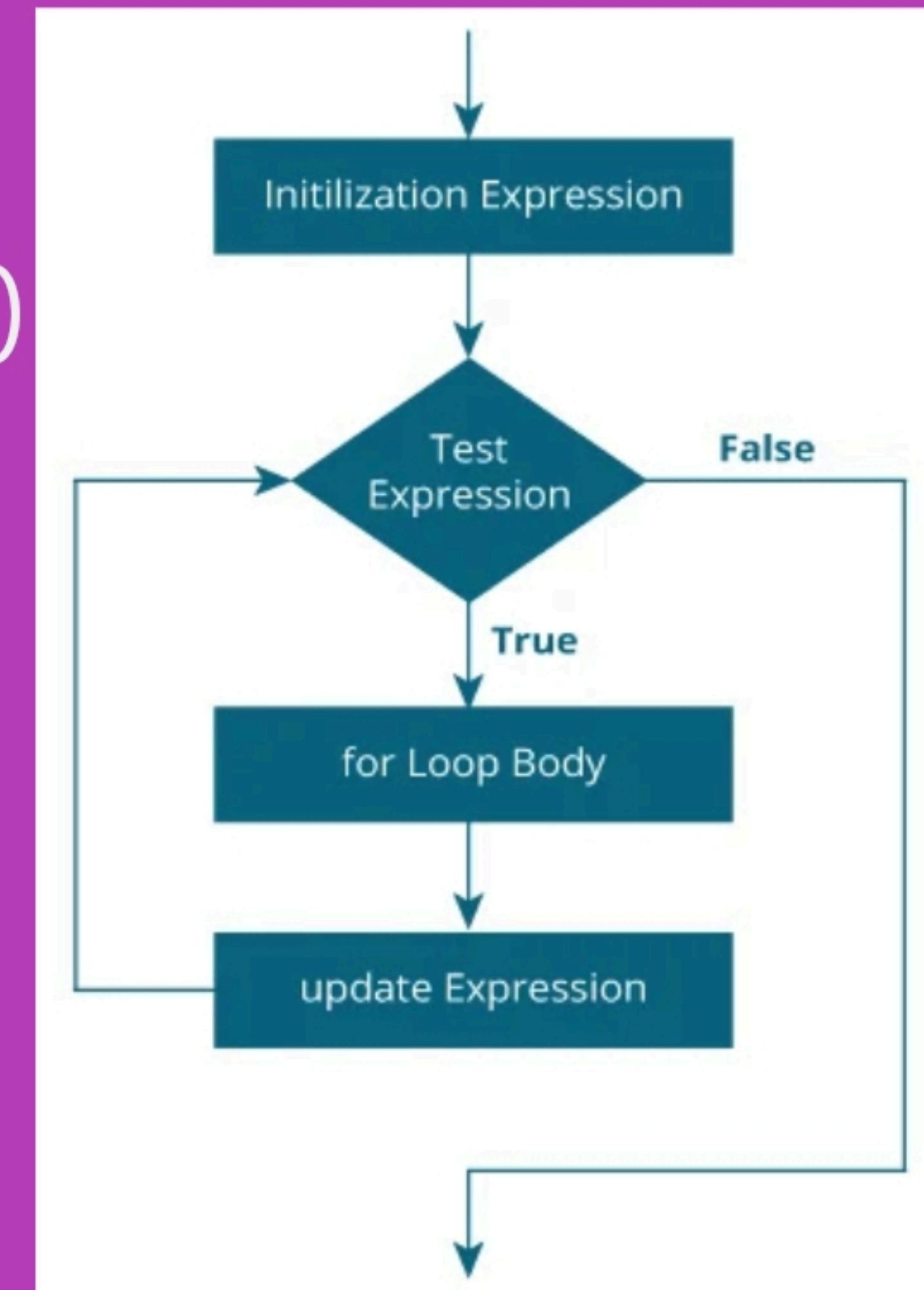


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for loop

Syntax

```
for ( initialization; condition; increment )  
{  
    statement(s); }
```



for loop

Example :

```
// Print numbers from 1 to 10
#include <stdio.h>

int main() {
    int i;

    for (i = 1; i < 11; ++i)
    {
        printf("%d ", i);
    }
    return 0;
}
```

Output



```
1 2 3 4 5 6 7 8 9 10
```

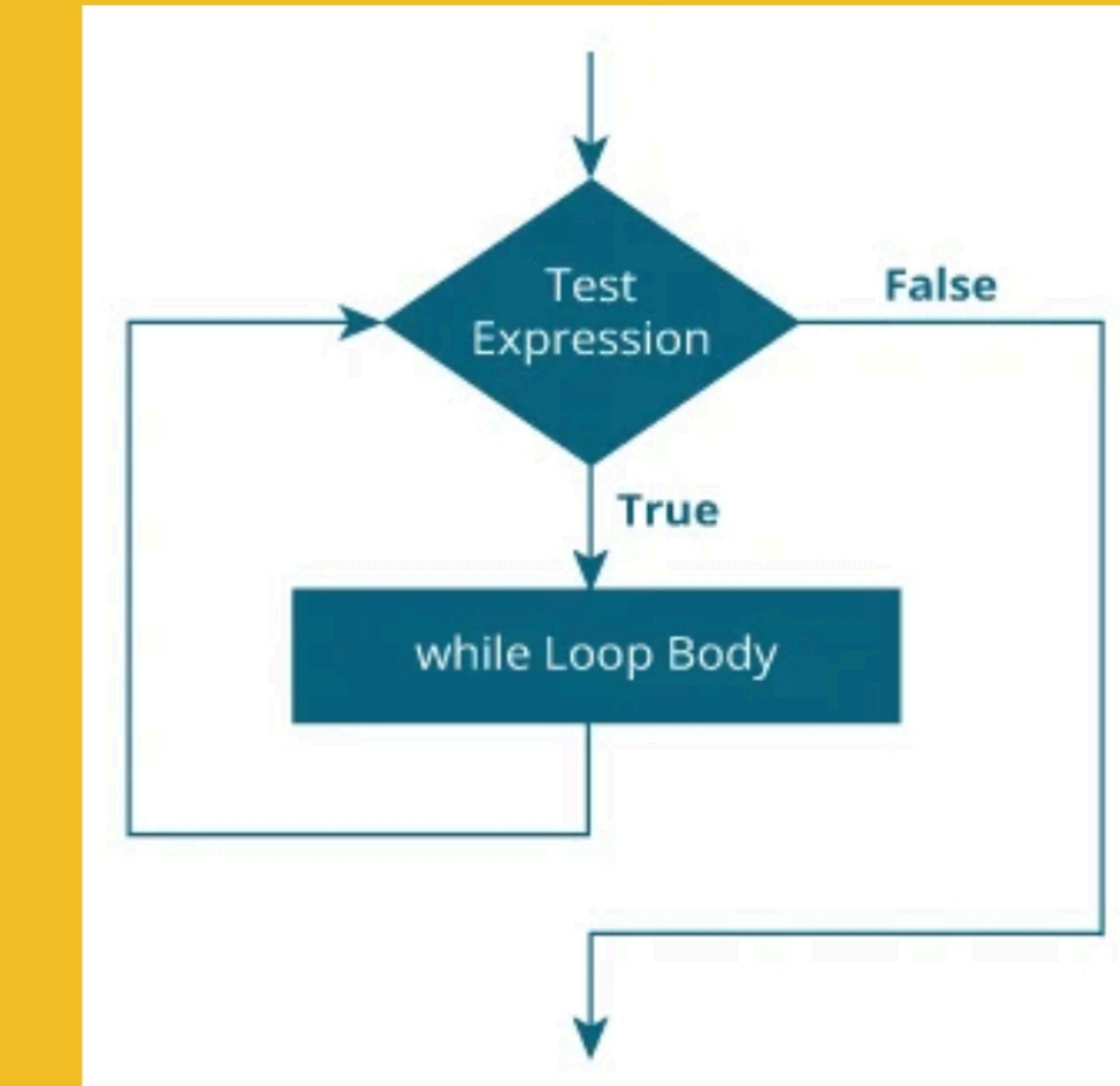
while Loop

A while loop in C programming repeatedly executes a target statement as long as a given condition is true.

WHILE LOOP

Syntax

```
while (testExpression) {  
    // the body of the loop  
}
```



While loop

Example :

```
// Print numbers from 1 to 5

#include <stdio.h>
int main() {
    int i = 1;

    while (i <= 5) {
        printf("%d\n", i);
        ++i;
    }

    return 0;
}
```

Output :



```
1
2
3
4
5
```

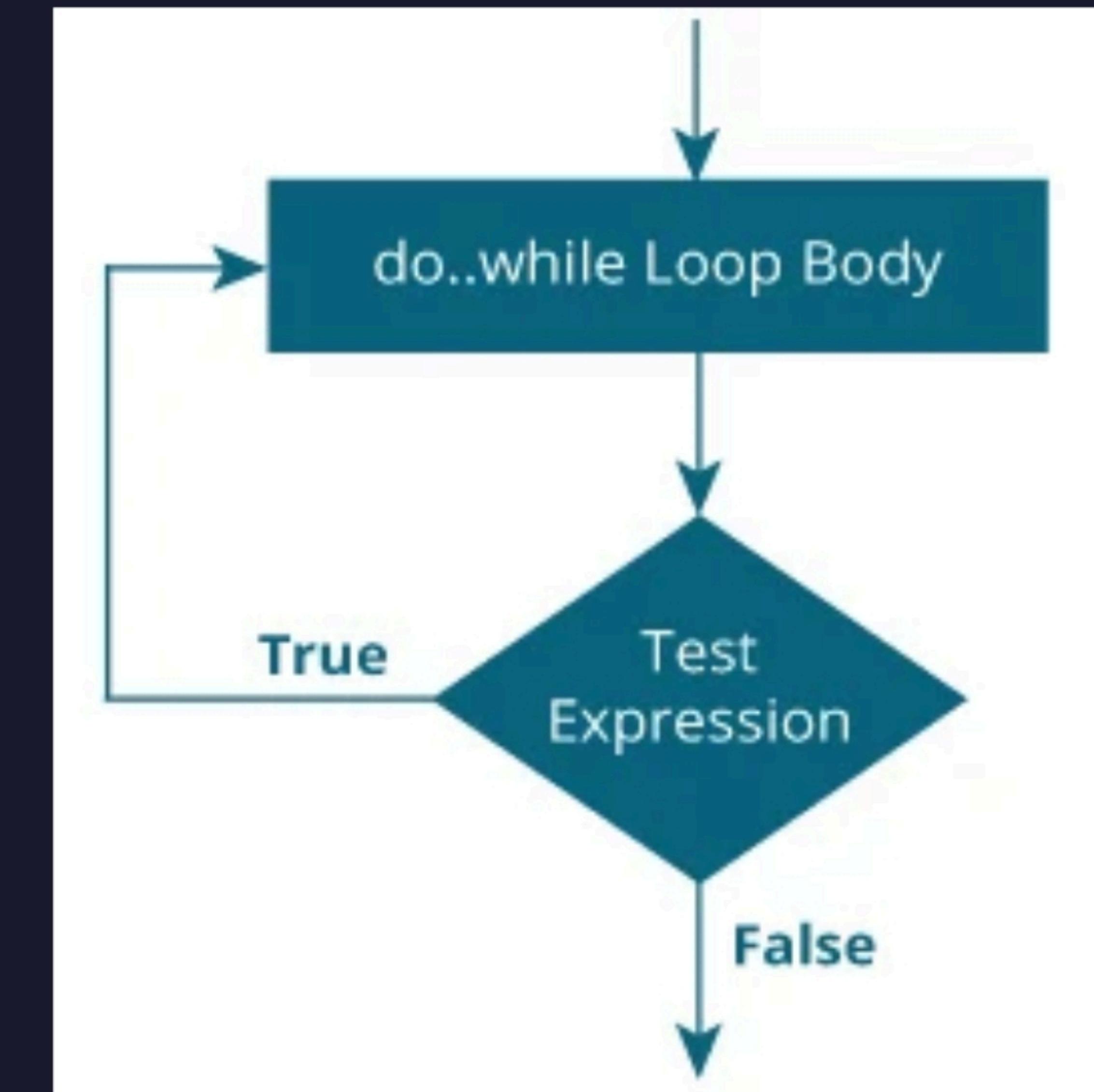
Do...While Loop

**In a do...while loop, the condition is always
executed after the body of a loop.**

DO...WHILE LOOP

Syntax

```
do {  
    // the body of the loop  
}  
while (testExpression);
```



Do...While Loop

Example:

do-While

```
int i = 0;  
do  
{  
    printf("%d", i);  
    i--;  
} while(i > 0);
```

Output: 0



THANK YOU

