Topic: While Loop in C

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Introduction to while Loop

- A while loop is used to repeat a block of code as long as a given condition is true.
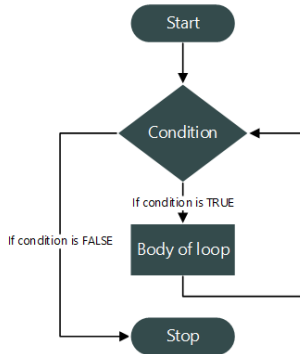

Figure: Flow chat of while loop

Syntax of while Loop in C

Syntax

```
while (condition) {
    /* Code to execute */
}
```

- The condition is checked before entering the loop.
- If the condition is false, the loop body does not execute.

Example of Simple While loop Program in C

code

```c
#include <stdio.h>

    main() {
    int i = 0;
    while (i <= 5) {
        printf("%d\n", i);
        i++;
    }

}
```

- This loop prints numbers from 0 to 5.
- The loop continues until i reaches 5.

Output

- i is initialized to 0.
- The loop checks $i \leq 5$; if true, the code inside is executed.
- When i reaches 5,the loop ends.

THANK YOU.