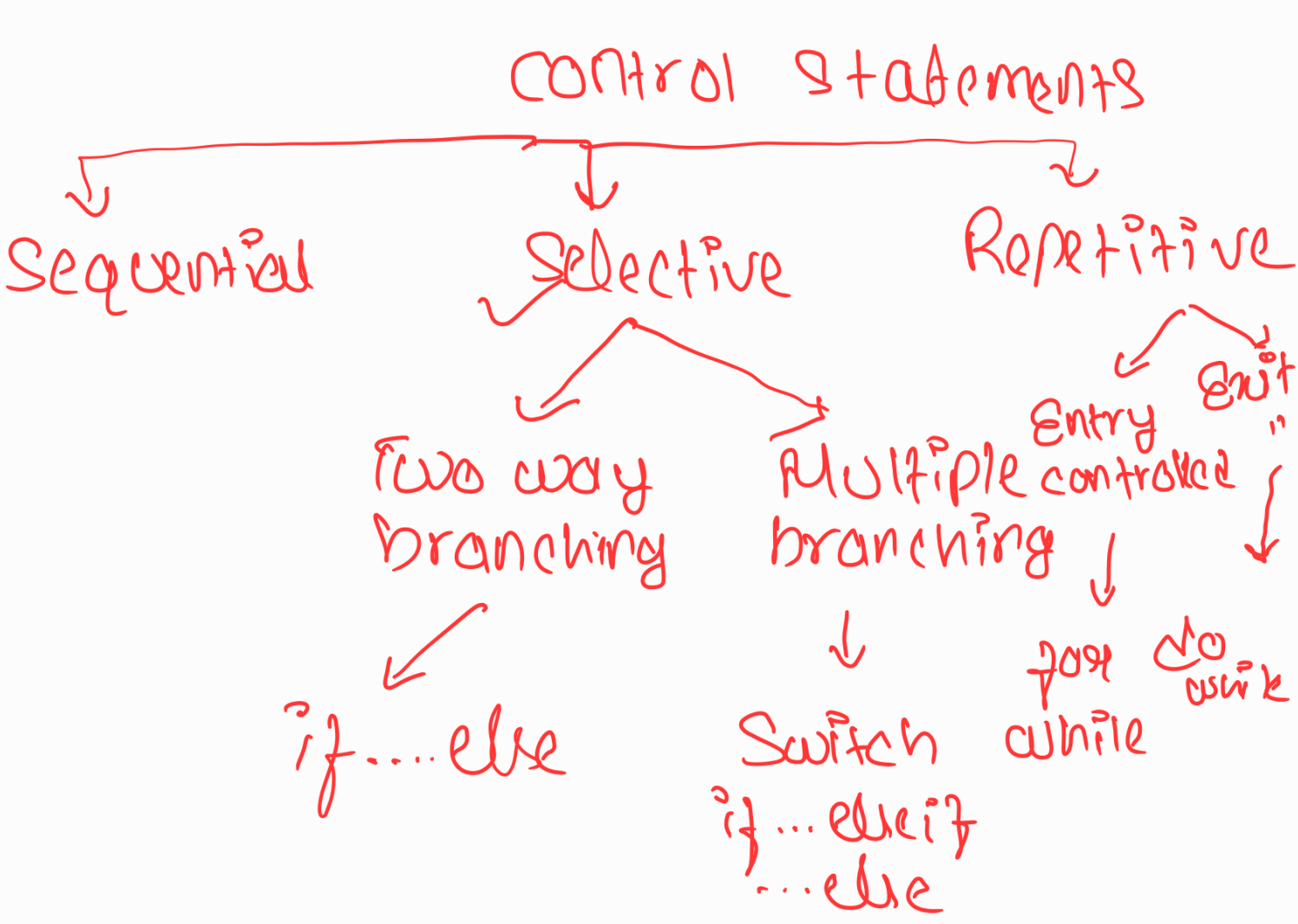
Chapter 5 :- Control Statements

→ There are 3 basic control structures.

(1) Sequential structures
→ Executing one instruction after another.

(11) Selective structuring (branching)
→ Selection means executing different sections of code depending on a condition.

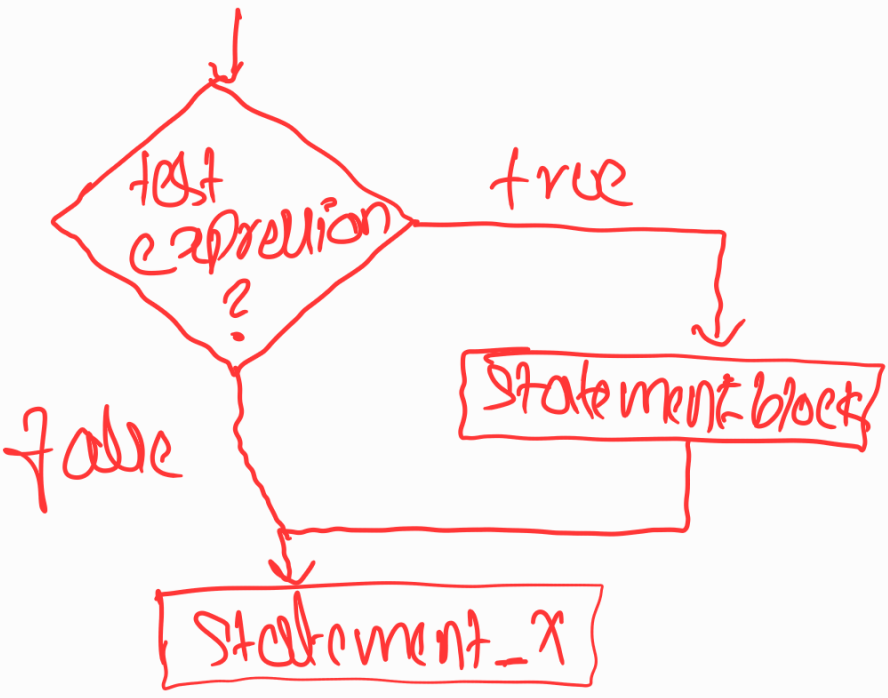
(3) Repetitive structures (looping)
→ Repetation means executing the same section of code more than once.



(#1) Selective Structured

① Simple if Statement

Syntax :- if (test expression)
{
Statement_block;
}
Statement_x;



(#) Giving 10% discount if customer bought above ₹5001-

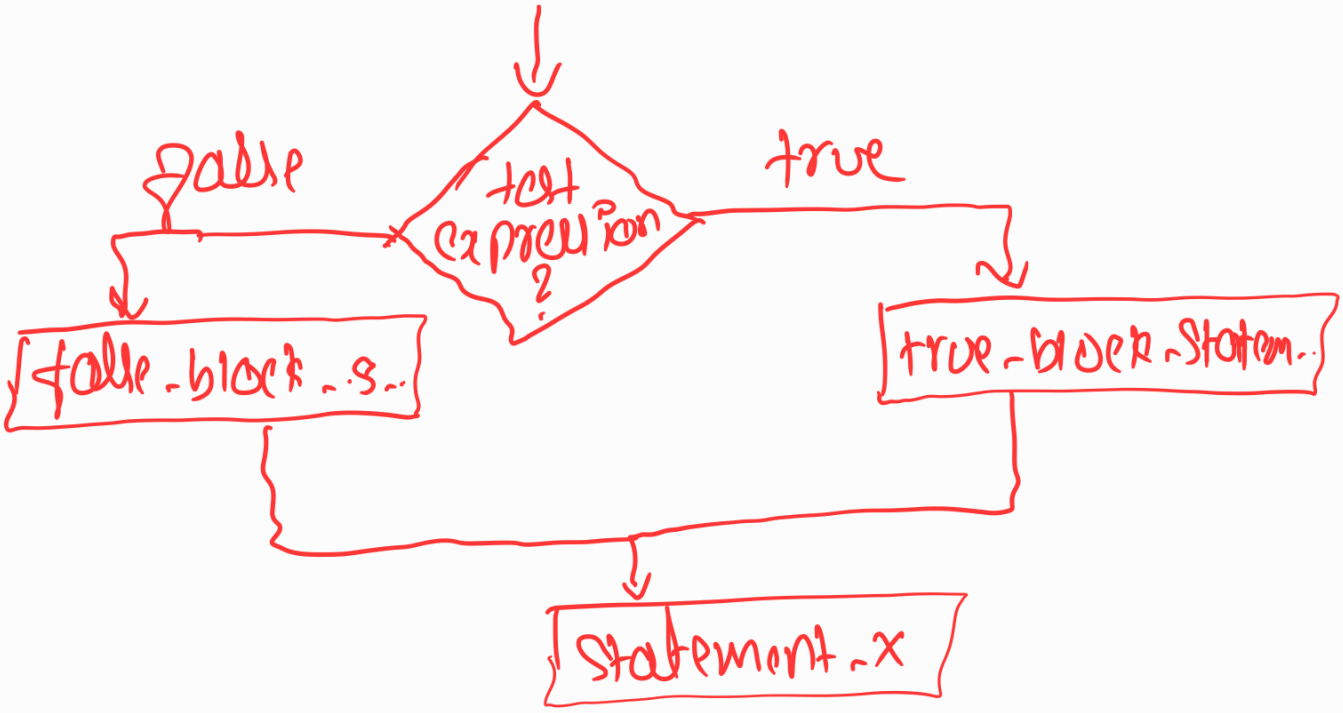
```
#include <stdio.h>
int main()
{
    float total, discount;
    .
    .
    .
    if( total >= 2500.0 )
    {
        discount = 0.1 * total;
        printf (" You have received
            %6.2f ", discount);
        total = total - discount;
```

```
    }
    printf(" Pay Rs %.2f", total);
    return 0;
}
```

② if .... else

Syntax:-

```
if (test expression)
{
    true_block_statement;
}
else
{
    false_block_statement;
}
statement_x;
```



(#) Even or odd.

↳ number % 2

ex:- 4 % 2 ⇒ 0 → remainder (even)

5 % 2 ⇒ 1 → remainder (odd)

if number % 2 = 0 then
It is even number

```
#include <stdio.h>
int main()
{
    int number;
    :
    :
    if( number %2 == 0)   // comparision operator
    {
     printf("%d is even",
             number);
    }
    else
     {
       printf("%d is odd",
               number);
     }
return 0;
```