Loop (Iterative statement)

Loops in programming are those special blocks of code which can repeat their body multiple times. So if we have a set of statements which we want to run more than one time then we can put them inside the loop.

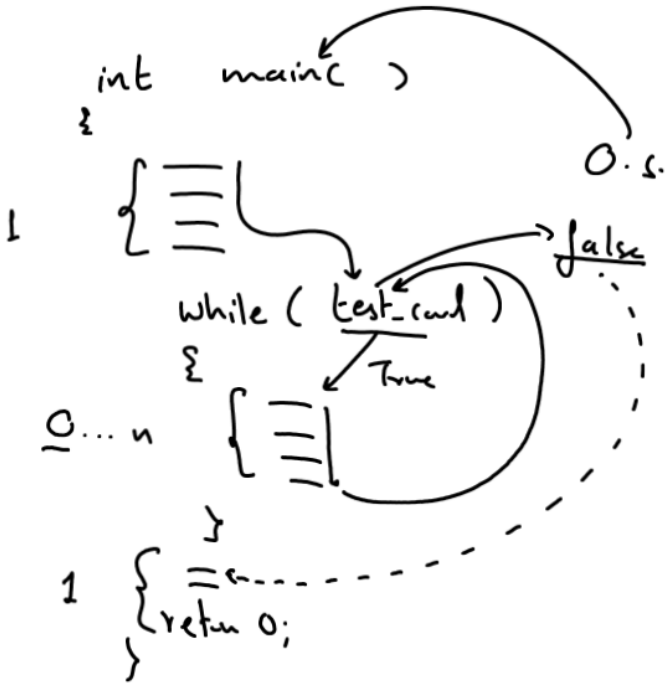
In C programming we have 3 keywords to implement loops and they are:

1. while

2. do while

3. for

SYNTAX OF WHILE LOOP

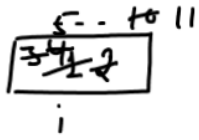


WAP to print first 10 natural numbers

Soln:
====

```
#include <stdio.h>
int main()
{
    int i;
   i=1;
   while(i<=10)
   {
        printf("\n%d",i);

        i=i+1;
   }
return 0;
}
```



Guess The Output
==========

```
#include <stdio.h>
int main()
{
    int i;
    i=1;
   while(i<=10)
   {
        printf("\n%d",i);
        i=i-1;
   }
return 0;
}
```

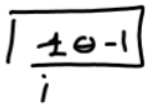
O/p:
====

1 —— neg min

Mingw -> int (4B)

Range of int

-2147483648 To 2147483647



1
0
-1
-2
.
.
.
-2147483648

Guess The Output
==========

```
#include <stdio.h>
int main()
{
     int i;
    while(i<=10)
    {
          printf("\n%d",i);
          i=i+1;
    }
return 0;
}
```

O/p:
====
Unpredictable

Guess The Output
==========

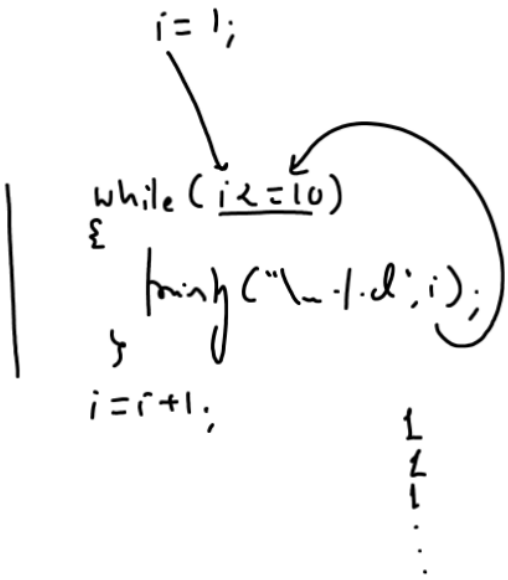
```
#include <stdio.h>
int main()
{
     int i;
     i=1;
    while(i>=10)
    {
          printf("\n%d",i);
          i=i+1;
    }
return 0;
}
```

O/p:
====
Blank Screen

Guess The Output
==========

```
#include <stdio.h>
int main()
{
    int i;
    i=1;
   while(i<=10)
        printf("\n%d",i);
        i=i+1;
return 0;
}
```

O/p:
====
Infinite

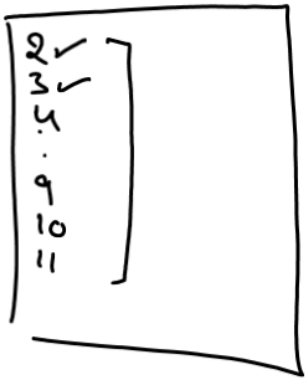


Guess The Output
==========

```
#include <stdio.h>
int main()
{
    int i;
    i=1;
   while(i<=10)
   {
        i=i+1;
        printf("\n%d",i);
   }
return 0;
}
```

O/p:

i = 1 2 3 4 . . 9 10 11

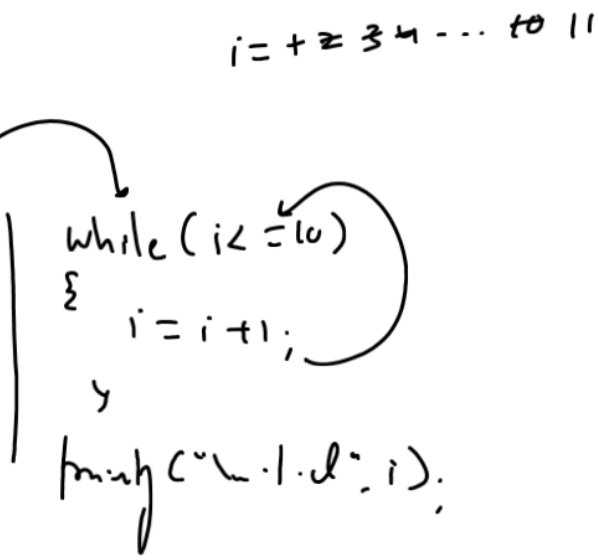


Guess The Output
==========

```
#include <stdio.h>
int main()
{
    int i;
    i=1;
   while(i<=10)
        i=i+1;
        printf("\n%d",i);

return 0;
}
```

O/p:
====
11



Assignment
=========
1. WAP to print 1st 10 natural numbers in reverse order.

SAMPLE OUTPUT
==========
10
9
8
7
6
5
4
3
2
1

2. WAP to accept an integer from the user and print all the numbers from 1 to that number. Assume that the number given by the user will be positive only.

SAMPLE OUTPUT
==========
Enter a int: 5
1
2
3
4
5

SAMPLE OUTPUT
==========
Enter a int: 6
1
2
3
4
5
6