

For loop  
Nested Loop  
User defined Function

```
for(i=1; i<=5 ; i++)
{
    printf("Inside loop\n");
}
```

for(step1 ; step2 ; step4) <sup>on entry check</sup>

step3 ===== }

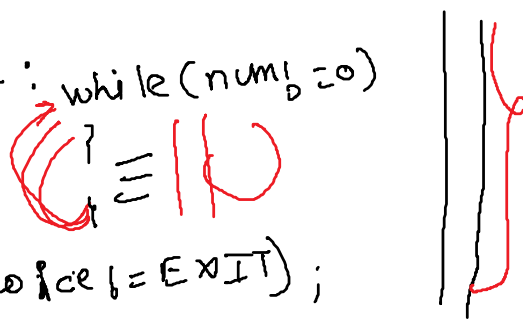
① i = 1	② 1 <= 5	③ pf(" ");
④ i = 2	② 2 <= 5	③ pf(" ")
④ i = 3	② 3 <= 5	③ pf(" ")
④ i = 4	② 4 <= 5	③ pf(" -");
④ i = 5	② 5 <= 5	③ pf(" -");
④ i = 6	② 6 <= 5	X

1)

```

    case i: while (num != 0)
    {
        break;
    } while (mchoice != EXIT);

```



```
int main()
{
    int r,c;
    for(r=1;r<=5;r++)
    {
        for(c=1;c<=r;c++)
        {
            printf("%c",'A');
        }
        printf("\n");
    }
}
```

r=1 1<=5

c=1 1<=1

c=2 2<=1

r=2 2<=5

c=1 1<=2

c=2 2<=2

c=3 3<=2

r=3 3<=5

c=1 1<=3

c=2 2<=3

c=3 3<=3

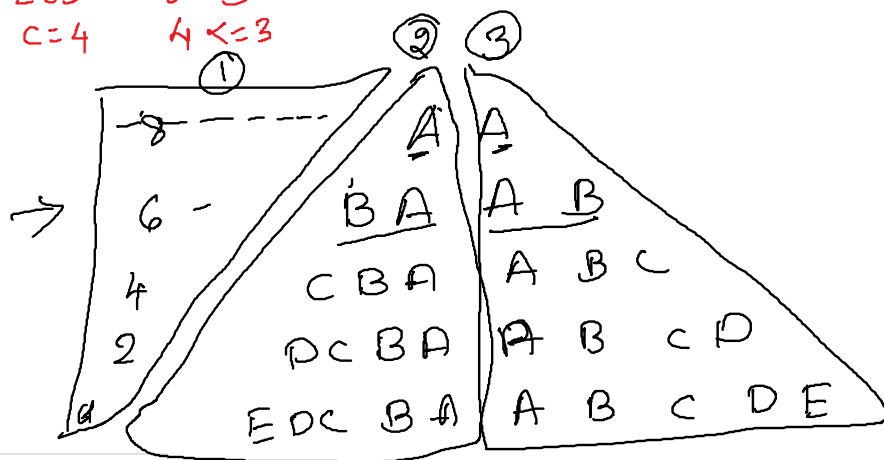
c=4 4<=3

A

A A

A A A

-



Function :

```
int printf (const char *s, ...)
```

} 100 lines  
Denries Ritchie  
lib fun<sup>n</sup>

```
int main()
```

} user defined fun<sup>n</sup>

```
int main()
```

} complex.

{ pf }

{ pf }

{ pf }

```
int main()
```

} Reduced complexity of a program

{ pf }

{ pf }

{ pf }

write once  
compile once  
many times

```
int x = printf("sunbeam");
```

7

int pf (const char \*s, ...)

x = 7

int value. 7

address &a

int a

the 100

`scanf ("%d", &a);` address -

int a  
int value: 5  
100 address

```
int main()
{
    char ch;
    //accept
    ch = accept(); //call to function //as
    function return value catch in some location
    display(ch); //ch here is called as actual
    argument which is passed by value
} //calling function
display(char c)
{
}
}
```

