

C Language

# Iterative Control instruction

Part - 2



Saurabh Shukla (MySirG)

# Agenda

- ① do-while loop
- ② for loop
- ③ break
- ④ continue

## Entry Control loop

```
while (condition)
{
    =
}
int i=1;
while(i<=10)
{
    printf("%d",i);
    i++;
}
1<=10 T
2<=10 T
3<=10 T
4<=10 T
:
10<=10 T
11<=10 F
```

## Exit Control loop

```
do
=
} while (condition);
int i=1;
do
{
    printf("%d",i);
    i++;
} while(i<=10);
2<=10 T
3<=10 T
4<=10 T
:
10<=10 T
11<=10 F
```

## Entry Control loop

```
for( ; ; )
{
    =
}
int i;
for(i=1; i<=10; i++)
{
    printf("%d", i);
}
1<=10 T
2<=10 T
3<=10 T
:
10<=10 T
11<=10 F
```

```
int main()
{
    int i=1;
```

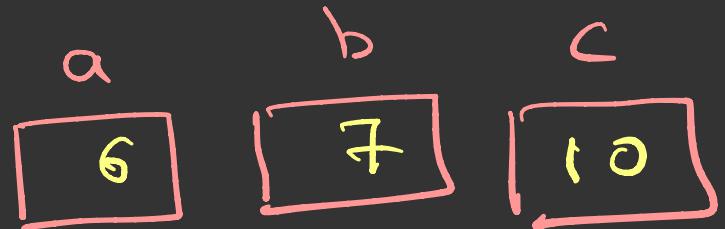
while ( ) error

```
for ( ; ; )
{
    printf("%d ", i);
    i++;
}
```

```
}
```

Find Output of the program

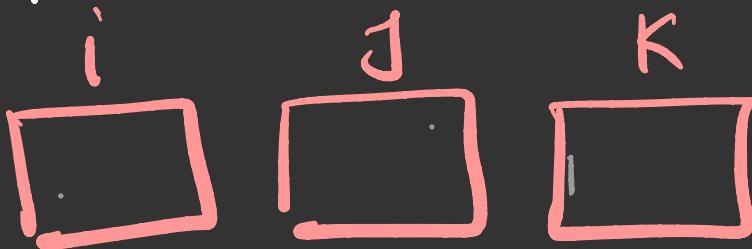
```
int main()
{
    int a=2,b=-1,c;
    do
    {
        c=a+b+1;
        printf("%d",c);
        a=b+1;
        b=a+1;
    } while(c<10);
}
```



22 6 10

Find output of the program

```
int main()
```



```
    int i, j, k;
```

```
    for (i=0; i<3; i++)
```

```
    {
```

```
        j = i*2 + 1;
```

```
        k = j*3 - 2;
```

```
}
```

```
    printf ("%d %d %d", i, j, k);
```

```
}
```

## break

while(condition)

{

    break;

}

.

- **break** is a keyword
- It can be used in the body of loop or in the body of switch.
- When **break** encounters loop terminates and control move out of the loop body.

while ( $i \leq 100$ )

{

=

if (-)

break;

=

$i++$ ;

}

Write a program which asks user to enter an even number, computer will give user at most 3 chances, if user failed to answer in all of the chances, "Game Over" message should be displayed on the screen, otherwise "You Win" message should be displayed and game stops immediately.

Write a program to add numbers entered by user. User can enter any number of numbers until he enters 0.

## Continue

while (condition)

{

  if (...)

    Continue;

  }

}

- continue is a keyword
- continue can only be used in the body of loop.
- continue transfers the control to the next iteration.