

**Question:** Is there any example for which the following two loops will not work same way?

```
/*Program 1 --> For loop*/
for (<init-stmnt>; <boolean-expr>; <incr-stmnt>)
{
    <body-statements>
}

/*Program 2 --> While loop*/
<init-stmnt>;
while (<boolean-expr>)
{
    <body-statements>
    <incr-stmnt>
}
```

**Solution:**

If the body-statements contains continue, then the two programs will work in different ways

```
1 int main()
2 {
3     int i = 0;
4     for(i = 0; i < 3; i++)
5     {
6         printf("loop ");
7         continue;
8     }
9
10    return 0;
11 }
12
```

**Example for program 2**

```
1 int main()
2 {
3     int i = 0;
4     while(i < 3)
5     {
6         printf("loop"); /* printed infinite times */
7         continue;
8         i++; /*This statement is never executed*/
9     }
10
11    return 0;
12 }
```