

# Looping in C

## The While Loop

```
while (test)
{
    ...
}
```

### While loop that counts up

```
idx=0;
// idx will range from 0,,9
while (idx<10)
{
    ...
    idx++;
}
```

### While loop that counts down

```
idx=10;
// idx will range from 10,,1
while (idx>0)
{
    .....
    idx--;
}
```

## The For Loop

```
for( initializer; test; count exp)
{
    ...
}
```

### For loop that counts up

```
// idx will range from 0,,9
for(idx=0; idx<10; idx++)
{
    ...
}
```

### For loop that counts down

```
// idx will range from 10..1
for(idx=10; idx>0; idx--)
{
    ...
}
```

### Any while loop:

```
initializer;
while (test)
{
    ...
    count exp;
}
```

### Can be written as:

```
for(initializer; test; count exp)
{
    ...
}
```