

CPSC 231 - Lab

LOOPS

Looooooooloop

Sometimes we need to do a job repeatedly as long as a specific condition is true.

We use loops for this kind of jobs.

Types of loops?

Simple loops : Keep going if the condition is true

Ranged-base loops: Do the job n times

Simple loop in python

```
# count down
n = input("Enter count down number")
while n > 0:
    print(n)
    n -= 1
```



How to stop a loop?

By voiding the condition:

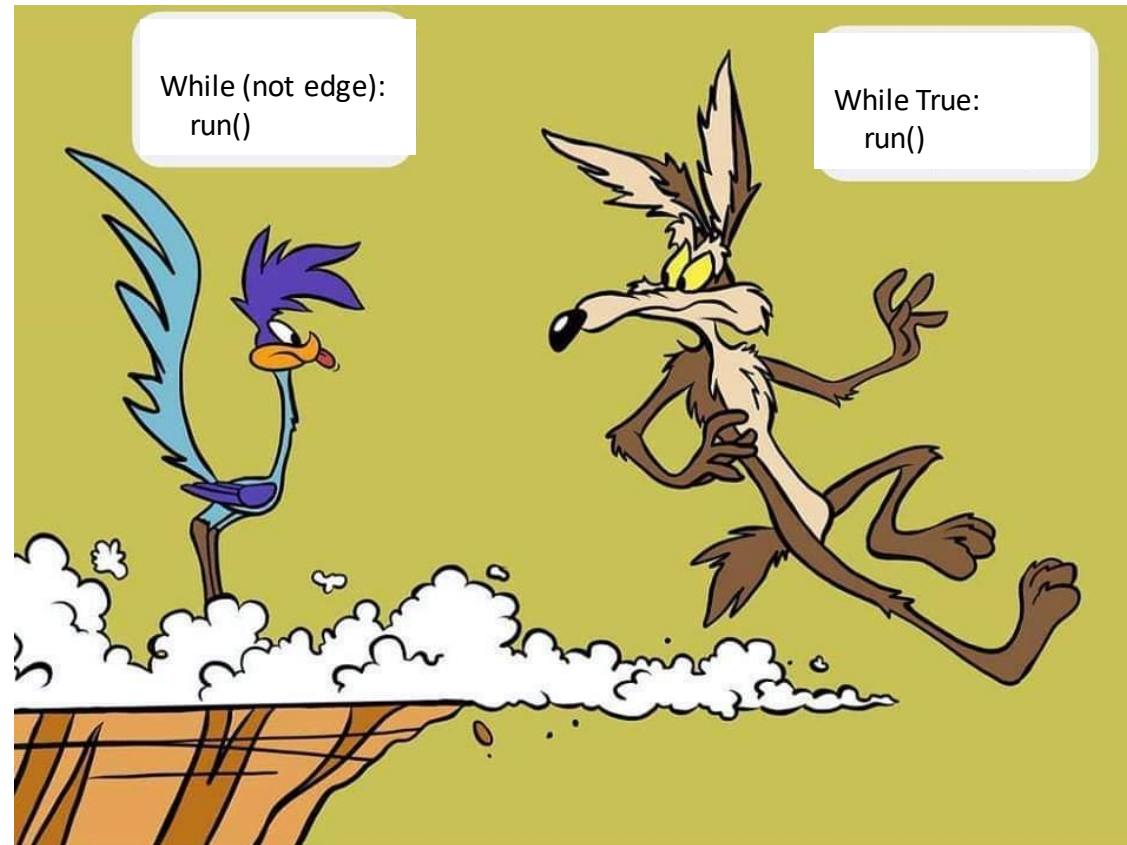
```
user_input = 'yes' #do not forgot to define the variable
while user_input == 'yes':
    user_input = input('Do you want to continue? (yes/no)')
```

How to stop a loop?

Using break:

```
while True:
    user_input = input('Do you want to continue? (yes/no)')
    if user_input != 'yes':
        break
```

NO INFINITE LOOPS!



Range-base loops

For <variable> in <range>:
 <body>

```
1  for i in range(1, 5):  
2      print(i)  
3
```

Range function

`range(start,end,step)`

Example:

`range(1,10,2) = [1,3,5,7,9]`

`range(1,10) = range(1,10,1) = [1,2,3,4,5,6,7,8,9]`

`range(10,1) = []`

`range(10,1,-1) = [10,9,8,7,6,5,4,3,2]`