

CS1117 – Introduction to Programming

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**A TRADITION OF
INDEPENDENT
THINKING**



UCC

University College Cork, Ireland
Coláiste na hOllscoile Corcaigh

Announcements

Continuous Assessment 1

Wednesday – 23rd October 3-4pm in room 107

Multiple Choice Questions

We will cover some sample questions
over the next few lectures

Announcements



Continuous Assessment 2

Canvas access from 12th November 9am

Submission deadline 23rd November 1am

Covering Lectures from week 1 to week 9

Announcements

Lab 5 and Lab 6

This week I will release Lab 5 and Lab 6 on Monday 14th of October @ 9am

Lab 5 will have a submission deadline of 19th October @ 1am

Lab 6 will have a submission deadline of 26th October @ 1am

Announcements

CS1117 day off

I'm off campus next Monday, 21st October, so:

No morning class, no coding class, no office drop-in, no catch-up class and no evening class.

We will have labs on Tuesday/Wednesday and the Multiple Choice Quiz on Wednesday

Announcements

CS1117 day off

Monday, 28th October, is a bank holiday, and as such:

No morning class, no coding class, no office drop-in, no catch-up class and no evening class.

We will have labs on Tuesday/Wednesday and class on Wednesday as per normal

Announcements

Continuous Assessment 1

This Multiple Choice Quiz covers the first 5 weeks

This is a good chance for you to see if you understand what we have covered in the first 5 weeks

Announcements

Continuous Assessment 1

Available only on Canvas

So you will need a laptop, tablet, etc, to take the quiz.

If you do not have one of these, please let me know by email and I will arrange alternative access for the quiz.

Announcements

Continuous Assessment 1

Available only on Canvas

You will need access to Eduroam WiFi
so make sure you have signed up

IP filtering will be used for access to the quiz

Announcements



Continuous Assessment 1

Available only on Canvas

A code will be needed to access the quiz

This will be given out at the beginning of the class

Announcements



Continuous Assessment 1

Mobile phones will be turned off and placed on the desk in front of you.

You should not access online website for answers during the quiz

If you are seen surfing these sites, you will get a zero grade for this quiz.

Announcements



Continuous Assessment 1

This work must be your own,
so no asking your neighbour for answers

Do not take answers from others machines

There is no guarantee they are correct :)

Announcements



Sign-In

To practise new IP and access code filtering,
you will sign-in to a quiz today 😊

So, make sure you are on Eduroam

If you do not have access to Eduroam or can not sign-in,
let me know now or after class.

Announcements



Sign-In

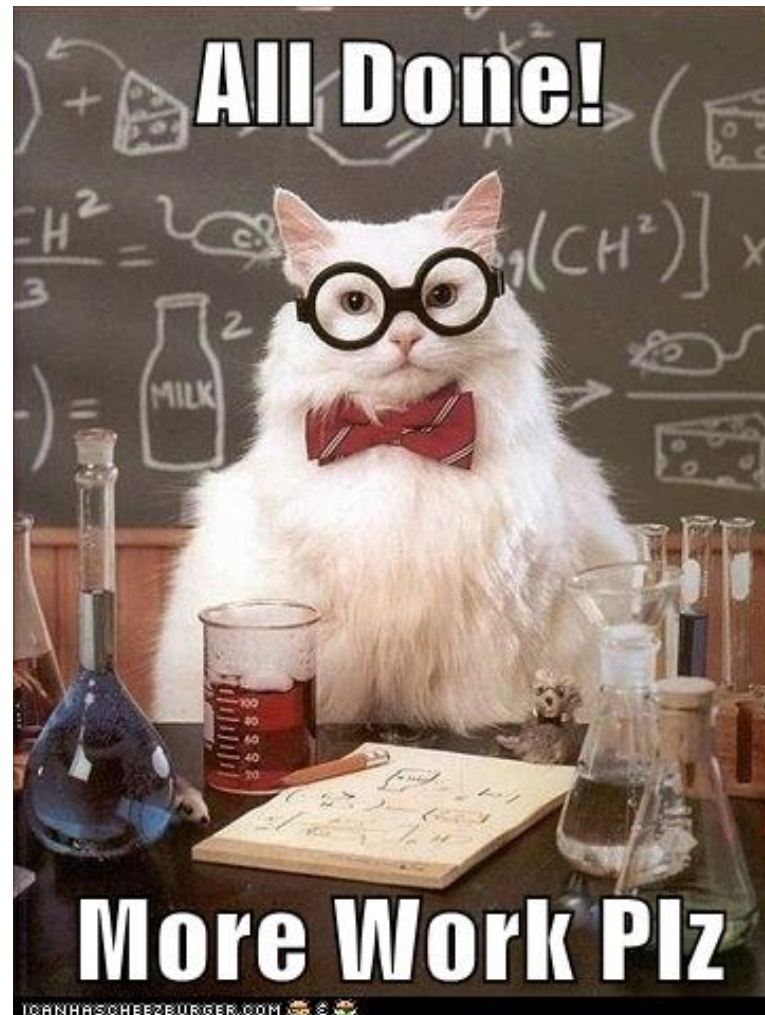
Let's look at what sign-in looks now

Canvas / Student view

Canvas Student App

Let's Sign into this lecture now

Access Code:
12345



for loops



We saw this morning we can replace `if` with `for`

But what about `while`...

while from week 5

```
# WHILE EXAMPLES FROM WEEK 5  
i = 0  
while i < 10:  
    print(i)  
    i += 1
```

while from week 5



```
# WHILE EXAMPLES FROM WEEK 5  
i = 0  
while i < 10:  
    print(i)  
    i += 1
```

```
i = 0  
for i < 10:  
    -----  
    print(i)  
    i += 1
```

while from week 5



```
# WHILE EXAMPLES FROM WEEK 5
i = 0
while i < 10:
    print(i)
    i += 1
```

```
i = 0
for i < 10:
    print(i)
    i += 1
```

No



Live Coding Time...

Let's see why not...

for range



Similar to *slicing*, range consists of:

```
range(start , end , step)
```

start is zero by default

Returned values do **NOT** include the *end* value!!!!

step is the values to *step* over the list

for range



range (end)

```
for val in range(5):  
    print(val)
```

Output:

What is the output?

for range



range (*end*)

```
for val in range(5):  
    print(val)
```

Output:

0 1 2 3 4

for range



range(start , end)

```
for val in range(1 , 5):  
    print(val)
```

Output:

What is the output?

for range



range (*start* , *end*)

```
for val in range(1 , 5):  
    print(val)
```

Output:

1 2 3 4

for range



range(start , end , step)

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

Output:

What is the output?

for range



range(start , end , step)

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

Output:

1 3

for range



`range(start , end , step)`

Negative steps

```
for val in range(-1 , -5 , -2):  
    print(val)
```

Output:

What is the output?

for range



range(start , end , step)

Negative steps

```
for val in range(-1 , -5 , -2):  
    print(val)
```

Output:

-1 -3

for range



range(start , end , step)

Negative steps

```
for val in range(10 , 4 , -2):  
    print(val)
```

Output:

What is the output?

for range



range(start , end , step)

Negative steps

```
for val in range(10 , 4 , -2):  
    print(val)
```

Output:

10 8 6



Live Coding Time...

Let's look at a few examples of range...



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