

CPSC 231 (Winter 2017)

TA: Samiul Azam

Introduction

- TA info:
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Introduction

- How to contact:
 - Through **email**
 - Email subject should start with “**CPSC 231**”
 - When you are submitting your assignment,
 - The email subject should be “**CPSC 231 Assignment XX**”.
 - Email body should contain **your full name and UCID**.

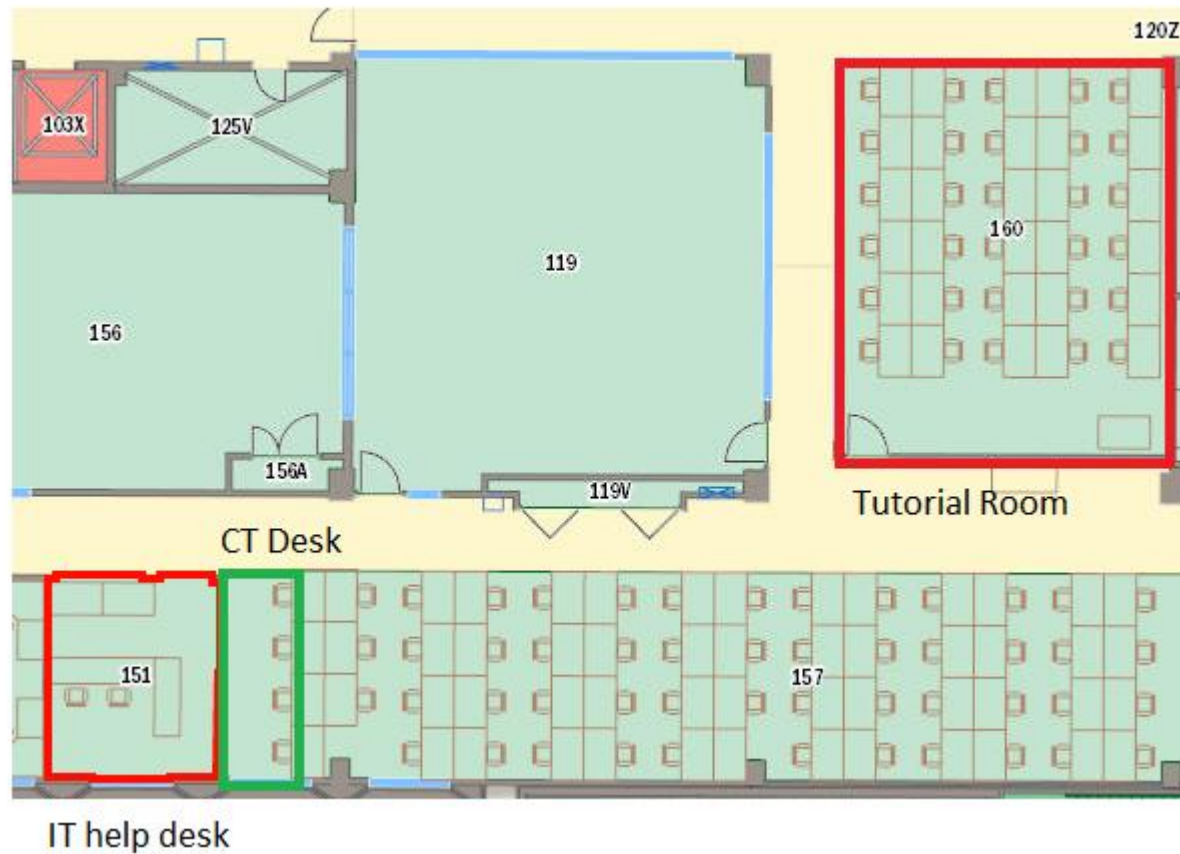
About Tutorial

- (Typically) the first tutorial per week will be **teaching** by the TA.
- Other one for **practice exercises**, and also some time to get **help on assignments** or **hints on exercises**.

Continuous Tutorial (CT hour)

- My CT hour: Wednesday 1:00pm to 2:00pm
 - Starts from 25th January
 - Location : CT Desk (at the side of the MS IT help desk)
- You can also take help from other TAs of this course.
 - You will find the schedule of other TAs of CPSC 231 at the CT desk.

Continuous Tutorial (CT hour)



CPSC account

- Take **CPSC account** from the IT Help desk (MS 151)
 - If you don't have it then collect it now
 - Please change the default password
- Login into CPSC Linux machines (do it now)
 - Don't forget to logout before leaving the machine

Some Linux Command

- http://engg.ucalgary.ca/support/self_help_faq/general_faq/common_linux_commands
- <http://www.cpsc.ucalgary.ca/~aycock/231/unix.html>
- Find a Linux **Terminal**
- Some important commands:
 - **pwd** (present working directory)
 - **ls** (all files and directories in the current directory)
 - **cd** dir1/dir2 (change directory. separated by front slash)
 - **cd ..** (return to parent directory)
 - **mkdir** dir_name (make a new folder with named 'dir_name')
 - **rmdir** dir_name (remove folder with named 'dir_name' if it is empty)
 - **touch** code.py (creating a file named code.py.
press Ctrl+z to come back to the linux cmd)

Some Linux Command

- **rm** code.py (remove the file named code.py)
- **rm *** (remove all files from the current directory)
- **gedit** code.py (open the file code.py using gedit)
- **python3** code.py (execute the file using python)
- **bg** (place a job in background)
- **exit**

Python Interpreter

- Type *python3* in the Linux terminal
 - Starts the Python interpreter (*>>>*)
 - Press *Ctrl+z* to exit from the interpreter

Try this : *>>> print("hello world")*

Python program from a file

- Create a python file (extension should .py)
 - `touch code.py`
- Open it with gedit
 - `gedit code.py`
- Now type necessary python code in the editor.
Don't forget to save it.
- Running the code
 - `python3 code.py`

Turtle functions

<code>turtle.left(<i>n</i>)</code>	turns turtle left by <i>n</i> degrees
<code>turtle.right(<i>n</i>)</code>	turns turtle right by <i>n</i> degrees
<code>turtle.forward(<i>n</i>)</code>	move turtle forward <i>n</i> units
<code>turtle.backward(<i>n</i>)</code>	move turtle backward <i>n</i> units
<code>turtle.penup()</code>	lift turtle's pen up (to move turtle without drawing)
<code>turtle.pendown()</code>	put turtle's pen down
<code>turtle.showturtle()</code>	shows the turtle
<code>turtle.hideturtle()</code>	hides the turtle (it's still there and you can still draw, you just can't see the turtle)
<code>turtle.reset()</code>	erase everything drawn and return turtle to its original state
<code>turtle.home()</code>	moves turtle to its home position in the center, with its heading at 0
<code>turtle.clear()</code>	erase everything drawn but don't move turtle
<code>turtle.setheading(<i>n</i>)</code>	sets the turtle's heading to <i>n</i> degrees (not relative to its current heading)
<code>turtle.undo()</code>	undoes the last turtle command if possible
<code>turtle.setup(<i>w</i>, <i>h</i>)</code>	makes the turtle window have width <i>w</i> and height <i>h</i> (doesn't erase the picture)

More Turtle functions

- `turtle.goto(x,y)`
- `turtle.circle(r, angle)`
- `turtle.speed(n)`
- `turtle.width(n)`
- `turtle.pencolor("colorname")`
- `turtle.fillcolor("colorname")`
- `turtle.bgcolor("colorname")`
- `turtle.begin_fill()`
- `turtle.end_fill()`
- `turtle.write(text, font=("Arial", fontsize, "bold"))`

Color names

light yellow	misty rose	peru	saddle brown	snow3	violet
lime green	moccasin	pink	salmon	snow4	violet red
linen	navajo white	pink1	salmon1	spring green	wheat
magenta	navy	pink2	salmon2	steel blue	wheat1
magenta1	navy blue	pink3	salmon3	tan	wheat2
magenta2	old lace	pink4	salmon4	tan1	wheat3
magenta3	olive drab	plum	sandy brown	tan2	wheat4
magenta4	orange	plum1	sea green	tan3	white
maroon	orange red	plum2	seashell	tan4	white smoke
maroon1	orange1	plum3	seashell1	thistle	yellow
maroon2	orange2	plum4	seashell2	thistle1	yellow green
maroon3	orange3	powder blue	seashell3	thistle2	yellow1
maroon4	orange4	purple	seashell4	thistle3	yellow2
medium aquamarine	orchid	purple1	sienna	thistle4	yellow3
medium blue	orchid1	purple2	sienna1	tomato	yellow4
medium orchid	orchid2	purple3	sienna2	tomato1	
medium purple	orchid3	purple4	sienna3	tomato2	
medium sea green	orchid4	red	sienna4	tomato3	
medium slate blue	pale goldenrod	red1	sky blue	tomato4	
medium spring green	pale green	red2	slate blue	turquoise	
medium turquoise	pale turquoise	red3	slate gray	turquoise1	
medium violet red	pale violet red	red4	snow	turquoise2	
midnight blue	papaya whip	rosy brown	snow1	turquoise3	
mint cream	peach puff	royal blue	snow2	turquoise4	

Try others also (if suitable)

<http://docs.python.org/py3k/library/turtle.html>

Today's task

- No marks on it.
- *Write a "Hello, X" program where you need to print the name of someone you don't already know in the tutorial.*
 - Create a python file
 - Write necessary code using *gedit*
 - Run the code from the *Linux terminal*

Thank you