

CPSC 231 Tutorial #2

<https://goo.gl/Hv7ckS>

CS Department PSA

1. No more free printing
2. The new printer already exists on the Linux machines. For Windows and personal installation go [here](#)
3. **Never** unplug or power off lab machines.
4. Improperly logging out may cause sign-in issues on other machines
5. An idle machine may automatically log you off after some time. **Save frequently** or log off when leaving a machine.

Important Dates

- Assignment 1
 - Individual **Due Tomorrow**
 - Paired **Due Next Friday**
- Quiz #2 **Next Lecture**
 - Quiz 1 will be handed back sometime next week

Reminders

- Get a CS account at the help desk (separate from ucalgary and IT accounts)
- Join Piazza
- Bookmark the [course website](#)

Last time...

- Install Python 3 (python.org/downloads)
 - *Python is already on Lab machines*
- [Windows]
 - **python** -m pip install -U numpy --user
 - **python** -m pip install -U pygame --user
- [Mac/Linux]
 - **python3** -m pip install -U numpy --user
 - **python3** -m pip install -U pygame --user

From here on, I will be using **python3**.

Last time...

- Download and unzip [introsocs-1.0](#)
- “cd” to extracted location and do

```
python3 setup.py install --user
```

- Download and unzip [karel](#)
- Place all your python code is in the same folder/directory as the karel and worlds folder

Command Prompt/Terminal ≠ Python Shell

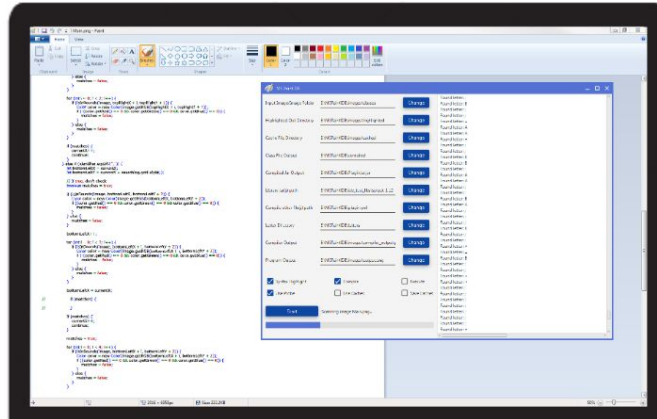
Text Editors

- Visual Studio Code
- Sublime Text
- Notepad++



MS Paint IDE

Learning how to use an IDE shouldn't be as hard as learning the language



Karel Builds Some Houses

Karel Builds a House

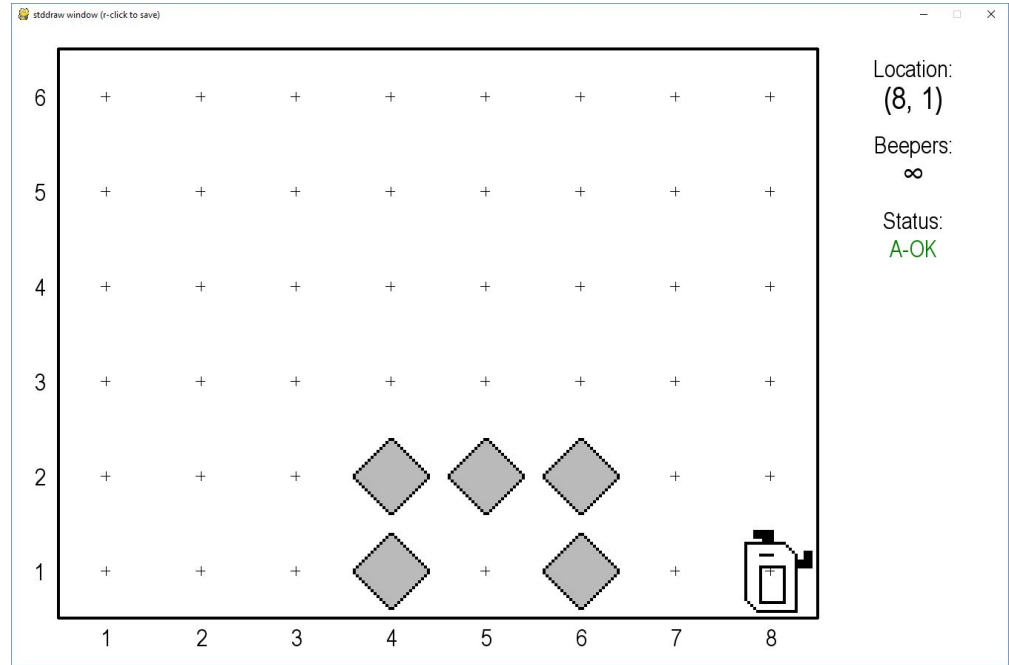
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Problem:

- Build a house on 5th Ave 1st St **(5,1)** then sit in the bottom right corner facing **West**

Assumptions:

- Karel begins at **(1, 1)** facing **East**
- Karel has **infinite** beepers
- There is always enough room to build the house



Karel Builds More Houses

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Problem:

- A beeper marks a location where Karel should build a house
- The beeper's location is the “door”, e.g. the marker should not be present after the house is finished.

Assumptions:

- Karel begins at **(1, 1)** facing **East**
- Karel has **infinite** beepers
- There is always enough room to build the house
- There is always at least one tile of empty space between each finished house and/or wall

