B Web IDE – Python3 Environment

Accessing the IDE

1. Go to: <https://repl.it/>
2. Select Python3
3. Sign-up / Create an account
4. Make sure you can remember your account information for the rest of the course.

Using the IDE

* Use the black area like a calculator to try simple statements or commands
* Use the white area to create programs with multiple statements

Accessing the Tutorial

* Go to: <http://www.letslearnpython.com/learn/>
* Skip directly to “Lesson 12: Input”

Level 1: Input & Logic

1. Read through “Lesson 12: Input – What Is Input?” and “Lesson 12: Input – Example” and “Lesson 12: Input – Shortcut”.
2. Type the following code into the white area of the IDE and run the program. Explain what you see in the black area of the IDE.

print("Type your name:")

name = input()

print("Hi", name, "how are you?")

First I see Type your name, and then once I type my name it reply’s with Hi Gurnoor how are you?

1. Complete “Lesson 9: Logic – Many Choices” by typing the sample commands in the white area of the IDE.
   1. Combine the lesson code with the code from question #2 above to create a logic choice based on input read from the console.
   2. If the typed name equals your name then print out “Hello Me!”
   3. Else if the typed name equals your friend’s name then print out “Hello Friend.”
   4. Else print out “Who are you?”
   5. Provide your complete program below.

print("Type your name:")

name = input()

myname = "Gurnoor"

if name == "Gurnoor":

print("Hello Me!")

elif name == "Karman":

print("Hello Friend!")

else:

print("Who are you?")

Level 2: Loops

1. Complete “Lesson 10: Loops – What Are Loops” and “Lesson 10: Loops – Counting Loops” by typing the sample commands in the white area of the IDE.
   1. Modify the loop to start at 0 and repeat 5 times..
   2. Provide your modified code and resulting output below.

for mynum in [0, 1, 2, 3, 4, 5]:

print(mynum)

0

1

2

3

4

Result

5

1. Create a list of the names of at least 5 of your friends and use a counting loop to print out their names as follows:.
   1. Create a list of the names of at least 5 of your friends.
   2. Identify the highest list index (i.e. Index of the last name.)
   3. Create a counting loop to loop over the list indexes
   4. Use the loop index number to print “Hello “ + name for each of your friends.
   5. Provide your modified code and resulting output below.

* mycount = 0

while (mycount < 0):

print('hello', mycount)

mycount = mycount + 1

for mynum in ["Abdullah", "Akash", "Udi", "Amar", "Berry"]:

print("Hello", mynum)

Hello Abdullah

Hello Akash

Hello Udi

Hello Amar

Hello Berry

1. Complete “Lesson 10: Loops – Conditional Loops” by typing the sample commands in the white area of the IDE.
   1. Modify the loop to stop when the count becomes greater than 5.
   2. Provide your modified code and resulting output below.

* mycount = 0

while (mycount > 5):

print('The count is:', mycount)

mycount = mycount + 1

1. Create a list of the names of at least 5 of your friends and use a conditional loop to print out their names as follows:.
   1. Use your list of friends from question #2 above
   2. Create a conditional loop to loop over the list indexes
   3. Use the loop index number to print “Hello “ + name for each of your friends.
   4. Provide your modified code and resulting output below.

* mycount = 0

while (mycount < 0):

print('hello', mycount)

mycount = mycount + 1

for mynum in ["Gurnoor", "Akash", "Udi", "Manveer", "Amar"]:

print("Hello", mynum)

Hello Gurnoor

Hello Akash

Hello Udi

Hello Manveer

Hello Amar

Level 3: Functions

* 1. Complete “Lesson 11: Functions – Functions” by typing the sample commands in the black area of the IDE.
  2. Create a list of instructions for tying your shoes..
  3. Provide your shoe tying function below.
  4. Take 1 shoelace (the blue one) in the left hand and the right shoelace (the red one) in the right hand
  5. Place the blue lace over the red lace, and drop the blue lace
  6. Then pick up the red lace with your left hand and the blue lace with your right hand (the laces should be placed in a ‘X’ shape)
  7. Then put the red lace in the opening under the intersection of the two laces, then drop it.
  8. Now pick the red lace back up and pull both laces tight in opposite directions.
  9. Fold the red lace in your left hand in half and wrap the blue lace around you thumb.
  10. Now push the blue lace through the hole after you pull your thumb out with your right index finger.
  11. After that pull the tip of the folds in the laces.
  12. After that pull the bows tight.
  13. Now you should have a nice knot on your shoe.

tie\_shoes(laceL, laceR, shoeL, shoeR)