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”.**

Done

1. **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?")**

It shows Type your name:

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.**

if myname == “Karamvir "

print("Hello Me!"):

elif myname == ""

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("Hello", mynum)

Hello 0

Hello 1

Hello 2

Hello 3

Hello 4

Hello 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 ["Jujhar", "Manveer", "Helal", "Harry", "Karman"]:

print("Hello", mynum)

Hello Jujhar

Hello Manveer

Hello Helal

Hello Harry

Hello Karman

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 ["Jujhar", "Manveer", "Helal", "Harry", "Karman"]:

print("Hello", mynum)

Hello Jujhar

Hello Manveer

Hello Helal

Hello Harry

Hello Karman

Level 3: Functions

1. **Complete “Lesson 11: Functions – Functions” by typing the sample commands in the black area of the IDE.** 
   1. **Create a list of instructions for tying your shoes..**
   2. **Provide your shoe tying function below.**

**Step 1:**Take one lace in each hand and make an X. Draw the top lace through the bottom of the X and pull the two laces tight. Then make a loop out of each lace.

**Step 2:** Cross the bunny ears over each other

Cross one "ear" over the other, in the opposite order of your overhand knot.

**Step 3:** Run the bunny ears over each other

Explain how "the bunny runs around the tree" by bending one loop over the other.

**Step 4:** See the bunny jump in a hole

Now "the bunny sees a dog and jumps in the hole": Pass the tip of the bent ear through the hole.

**Step 5:** Pull loops tight

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