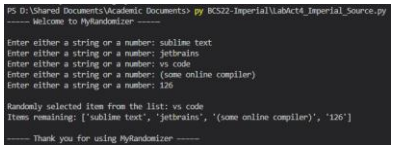
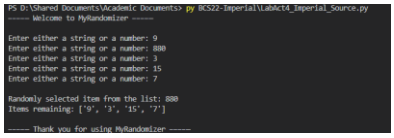
We used the ***random*** function to determine which one of our five inputs was going to be removed. This is our fourth laboratory activity under the subject **Application Development and Emerging Technologies**, under Mr. Deri Estrobo of De La Salle University–Dasmariñas.

The Process

Output





The pictures shown above represent three different types of inputs accepted. The first one consists of only strings, the second one a mix of strings and integers, and the final one consists only of integers.

Code

Source Code	Explanation
# # De La Salle University–Dasmariñas # S-ITCS227LA — Application Development and Emerging Technologies (Laboratory) # Luis Anton P. Imperial # BCS22 # Monday, February 19, 2024 # Laboratory Activity No. 4 # Create a 5-user input list that accept either string or number then select an item randomly from a list and remove the selected item randomly in the list. # Submit a pdf file (LabAct4_Surname) that contains the explanation of the code and include 3 sample output screenshot and python file.	Comments explaining the circumstances behind this script.
import random;	Get module that contains core functionality needed.

class randomFromList: def __init__(self):	Create modular class that can be used in other scripts.
self.app_name: str = "MyRandomizer";	Define name of app, used for greetings at start/end.
self.list: list = [];	Initialize list for items to be placed on
self.list_items: int = 5;	Describe the number of items to ask for. Default is 5.
def add_element(self):	When this function is run, it will ask for an element one time.
input_to_add = input("Enter either a string or a number: ");	Ask for input and place it into a variable.
self.list.append(input_to_add);	Add value of said variable into the list we created earlier.

def add_multiple_elements(self):
# Define a new variable counting all the items added. 	
items_added: int = 0;
 	
# Loop around until “items_added” is equal to limit set in init. 	
while(items_added < self.list_items):
self.add_element();
items_added += 1;
	Create loop, so we can have the ability to add elements one-by-one to array.

def remove_random_element(self):
item_to_remove = random.choice(self.list);
print("Randomly selected item from the list:", item_to_remove);
 	
self.list.remove(item_to_remove);
print("Items remaining:", self.list);
	Select a random element, remove it, show it, and then show the rest of the list.

def welcome(self):
# Greet user. 	
print("————————", "Welcome to", self.app_name, "————————");
print("");
 	
# Invoke first function. 	
self.add_multiple_elements();
print("");
 	
# Invoke second function. 	
self.remove_random_element();
	This function handles the Terminal User Interface (TUI) of the script.

# Thank user. 	
print("");
print("——————", "Thank you for using", self.app_name, "——————");	

def main():
randomizer_app = randomFromList()
randomizer_app.welcome();
	Create object using said class.

if __name__ == "__main__": main();	Launch local function.

Appendices

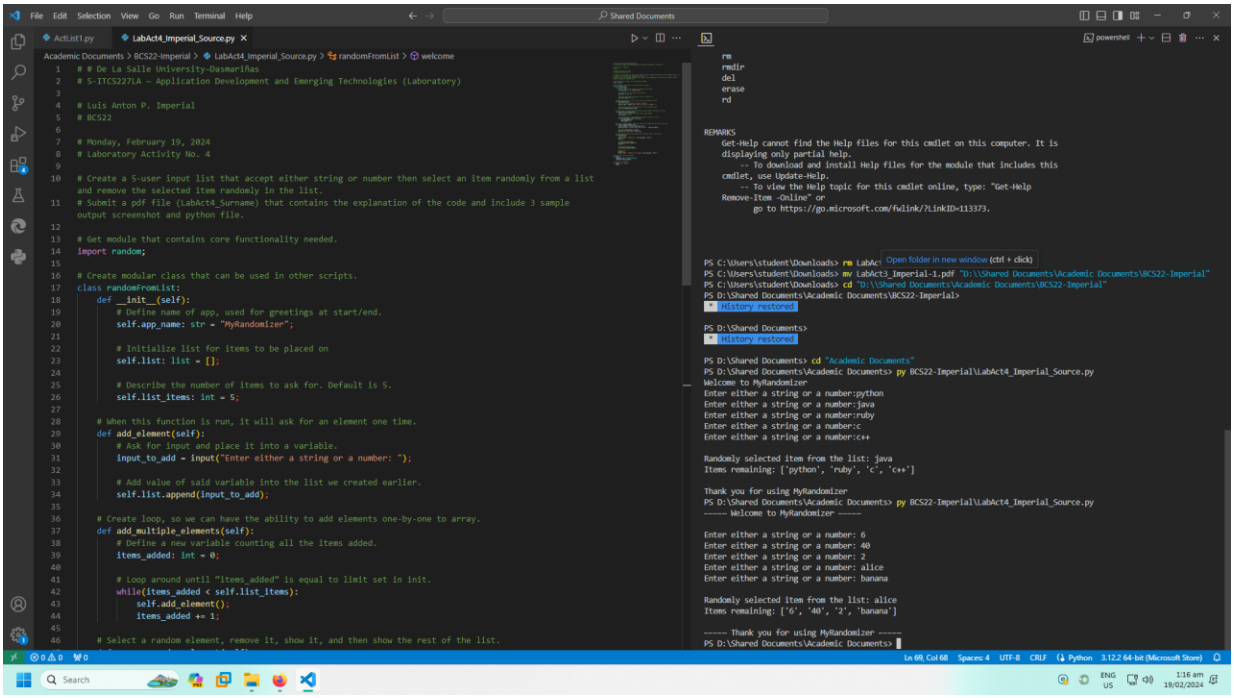
Further Reading

- Imperial, Luis Anton (2024). "*LabAct4_Imperial_Source.py*." Retrieved from <https://dlsudphl-my.sharepoint.com/:u:/g/personal/ilp0824_dlsud_edu_ph/EZ7AE8rhSVxHuQ4uYA_1pngB-DwTsqt68-jPXdjtJzv3qg?e=3d57RT>.
- Estrobo, Deri (2024). "Laboratory Activity No. 4." Retrieved from <https://dlsud.edu20.org/files/11884423/LabAct_4(2).jpg?lmsauth=2c170c63f090a4a60f1e28c9c97120c8a13bf771>.

Instructions

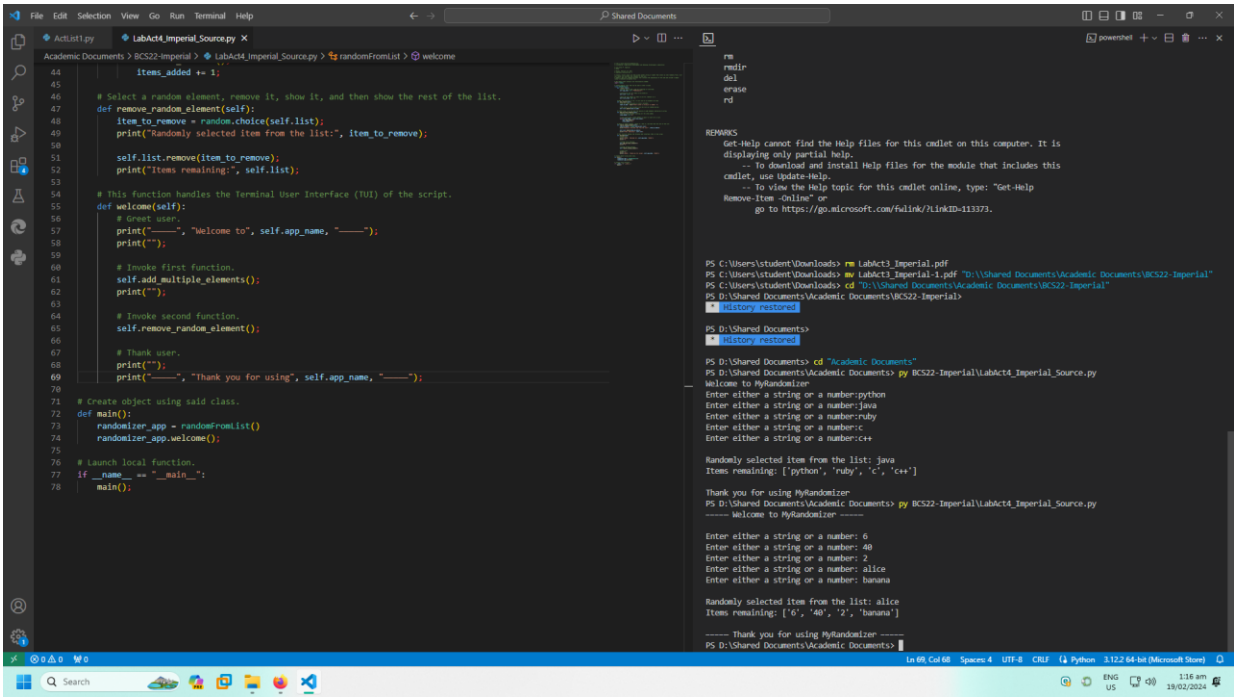
Create a 5-user input list that accept either string or number then select an item randomly from a list and remove the selected item randomly in the list. Submit a pdf file (LabAct4_Surname) that contains the explanation of the code and include 3 sample output screenshot and python file.	• Type: Dropbox • Max score: 50 • Category: Enabling Asssessment • Start: Feb 19, 10:00 am • Due: Feb 19, 1:00 pm
	• Max. attempts: 2 • Allow late submissions: ❌

Screen Captures of Code Written



```
# # De La Salle University-Dasmariñas
# S-ITCS227LA – Application Development and Emerging Technologies (Laboratory)

# Luis Anton P. Imperial
# BCS22

# Monday, February 19, 2024
# Laboratory Activity No. 4

# Create a 5-user input list that accept either string or number then select an item randomly from a list
and remove the selected item randomly in the list.
# Submit a pdf file (LabAct4_Surname) that contains the explanation of the code and include 3 sample
output screenshot and python file.

# Get module that contains core functionality needed.
import random;

# Create modular class that can be used in other scripts.
class randomFromList:
    def __init__(self):
        # Define name of app, used for greetings at start/end.
        self.app_name: str = "MyRandomizer";

        # Initialize list for items to be placed on
        self.list: list = [];

        # Describe the number of items to ask for. Default is 5.
        self.list_items: int = 5;

    # When this function is run, it will ask for an element one time.
    def add_element(self):
        # Ask for input and place it into a variable.
        input_to_add = input("Enter either a string or a number: ");

        # Add value of said variable into the list we created earlier.
        self.list.append(input_to_add);

    # Create loop, so we can have the ability to add elements one-by-one to array.
    def add_multiple_elements(self):
        # Define a new variable counting all the items added.
        items_added: int = 0;

        # Loop around until "items_added" is equal to limit set in init.
        while(items_added < self.list_items):
            self.add_element();
            items_added += 1;

    # Select a random element, remove it, show it, and then show the rest of the list.
```

```
rm
rmdir
del
erase
rd


REMARKS
    Get-Help cannot find the Help files for this cmdlet on this computer. It is
    displaying only partial help.
        -- To download and install Help files for the module that includes this
    cmdlet, use Update-Help.
        -- To view the Help topic for this cmdlet online, type: "Get-Help
    Remove-Item -Online" or
        go to https://go.microsoft.com/fwlink/?LinkID=113373.



PS C:\Users\student\Downloads> rm LabAc  Open folder in new window (ctrl + click)
PS C:\Users\student\Downloads> mv LabAct3_Imperial-1.pdf "D:\\Shared Documents\Academic Documents\BCS22-Imperial"
PS C:\Users\student\Downloads> cd "D:\\Shared Documents\Academic Documents\BCS22-Imperial"
PS D:\Shared Documents\Academic Documents\BCS22-Imperial>
 * History restored

PS D:\Shared Documents>
 * History restored

PS D:\Shared Documents> cd "Academic Documents"
PS D:\Shared Documents\Academic Documents> py BCS22-Imperial\LabAct4_Imperial_Source.py
Welcome to MyRandomizer
Enter either a string or a number:python
Enter either a string or a number:java
Enter either a string or a number:ruby
Enter either a string or a number:c
Enter either a string or a number:c++

Randomly selected item from the list: java
Items remaining: ['python', 'ruby', 'c', 'c++']

Thank you for using MyRandomizer
PS D:\Shared Documents\Academic Documents> py BCS22-Imperial\LabAct4_Imperial_Source.py
----- Welcome to MyRandomizer -----

Enter either a string or a number: 6
Enter either a string or a number: 40
Enter either a string or a number: 2
Enter either a string or a number: alice
Enter either a string or a number: banana

Randomly selected item from the list: alice
Items remaining: ['6', '40', '2', 'banana']

----- Thank you for using MyRandomizer -----
PS D:\Shared Documents\Academic Documents>
```



```
            items_added += 1;

    # Select a random element, remove it, show it, and then show the rest of the list.
    def remove_random_element(self):
        item_to_remove = random.choice(self.list);
        print("Randomly selected item from the list:", item_to_remove);

        self.list.remove(item_to_remove);
        print("Items remaining:", self.list);

    # This function handles the Terminal User Interface (TUI) of the script.
    def welcome(self):
        # Greet user.
        print("-----", "Welcome to", self.app_name, "-----");
        print("");

        # Invoke first function.
        self.add_multiple_elements();
        print("");

        # Invoke second function.
        self.remove_random_element();

        # Thank user.
        print("");
        print("-----", "Thank you for using", self.app_name, "-----");

# Create object using said class.
def main():
    randomizer_app = randomFromList()
    randomizer_app.welcome();

# Launch local function.
if __name__ == "__main__":
    main();
```

```
rm
rmdir
del
erase
rd


REMARKS
    Get-Help cannot find the Help files for this cmdlet on this computer. It is
    displaying only partial help.
        -- To download and install Help files for the module that includes this
    cmdlet, use Update-Help.
        -- To view the Help topic for this cmdlet online, type: "Get-Help
    Remove-Item -Online" or
        go to https://go.microsoft.com/fwlink/?LinkID=113373.



PS C:\Users\student\Downloads> rm LabAct3_Imperial.pdf
PS C:\Users\student\Downloads> mv LabAct3_Imperial-1.pdf "D:\\Shared Documents\Academic Documents\BCS22-Imperial"
PS C:\Users\student\Downloads> cd "D:\\Shared Documents\Academic Documents\BCS22-Imperial"
PS D:\Shared Documents\Academic Documents\BCS22-Imperial>
 * History restored

PS D:\Shared Documents>
 * History restored

PS D:\Shared Documents> cd "Academic Documents"
PS D:\Shared Documents\Academic Documents> py BCS22-Imperial\LabAct4_Imperial_Source.py
Welcome to MyRandomizer
Enter either a string or a number:python
Enter either a string or a number:java
Enter either a string or a number:ruby
Enter either a string or a number:c
Enter either a string or a number:c++

Randomly selected item from the list: java
Items remaining: ['python', 'ruby', 'c', 'c++']

Thank you for using MyRandomizer
PS D:\Shared Documents\Academic Documents> py BCS22-Imperial\LabAct4_Imperial_Source.py
----- Welcome to MyRandomizer -----

Enter either a string or a number: 6
Enter either a string or a number: 40
Enter either a string or a number: 2
Enter either a string or a number: alice
Enter either a string or a number: banana

Randomly selected item from the list: alice
Items remaining: ['6', '40', '2', 'banana']

----- Thank you for using MyRandomizer -----
PS D:\Shared Documents\Academic Documents>
```