

Assignment 5

Question 1:

Import the random module and perform the following operations

- Choose 10 numbers at random from 0 to 100 and save them in a list
- Print the above list, shuffle the list and print it again
- Make a choice of two numbers at random from the list

Question 2:

Create a class Account with the following:

Instance Variables:

- Name of the account holder
- Age of the account holder
- Location
- Account Balance – default to 0.0

Methods:

- Accessors/Getter Methods
- Mutator/Setter Methods
- Deposit Method
 - Parameters: money (integer) to deposit
 - Adds the money to the account balance
 - Returns updated account balance
- Withdraw Method:
 - Parameters: money (integer) to withdraw
 - Subtracts the money from the account balance
 - Returns updated account balance
- Make a print_account method or __str__ method with the following:
 - "\tThis account belongs to `name` aged `age` located in `location`.
The account balance is \$`balance`"

Question 3:

Use the class created in Question 2 to make the following code:

- Create 3 account objects with different values for name, age, location, and account balance (3 instances of the account class)
- Use the print_account method to print the details of account1
- Now print all the variables for account 2 as shown in the output
- Update name of account 2 to Flareon using the setter function
- Deposit \$25 into account 2 using the deposit method
- Use the print_account method on account1 to see the updated details
- Now use print_account method on account3
- Update age of account3 to 28 using the setter
- Withdraw \$50 from account3 using the withdraw function
- Use the print_account method on account3 to see the updated details

You may use these values for accounts:

Account1 – Name: Pikachu, Age: 10, Location: Toronto, Balance: 100.0

Account2 – Name: Eevee, Age: 30, Location: Ottawa

Update with – Name: Flareon, deposit: 25, new_balance: 25

Account3 – Name: Charmander, Age: 20, Location: St. John's, Balance: 500.0

Update with – Age: 28, withdraw: 50, new_balance: 450

The output should be something like this (obviously the way you print would be different)

```
Details for Account 1
    This account belongs to Pikachu aged 10 located at Toronto. The account balance is $100.0

Details for Account 2 Before Deposit
    This account belongs to Eevee aged 30 located at Ottawa. The account balance is $0.0

Details for Account 2 After Deposit
    This account belongs to Flareon aged 30 located at Ottawa. The account balance is $25.0

Details for Account 3 Before Withdrawal
    This account belongs to Charmander aged 20 located at St. John's. The account balance is $500.0

Details for Account 3 After Withdrawal
    This account belongs to Charmander aged 28 located at St. John's. The account balance is $450.0
```