## Testing:

est Number	Test Type	Target file	Test Name	Purpose of test	Test data or Situation	Expected Result	Actual Result	Outcome and Action Required
1. (Figure 1)	Unit Testing	edit.py	Testing add_account method with correct values	To see if a client adds successfully	First name, last name, title, pronoun, account number, date of birth, occupation, account balance, overdraft limit	Client is successfully added to the CSV file containing the list of clients	User is successfully added	No action required
2. (Figure 2)	Unit Testing	edit.py	Testing add_account method with wrong value for account number(using str instead of int)	To test if a type error is raised	account number	TypeError is raised and the client isn't added to the CSV file	TypeError was raised and client wasn't added to the CSV file	No action required
3. (Figure 3)	Unit Testing	edit.py	Testing account_check method	Check that no account found exception works with account that doesn't exist	Account number that doesn't exist on the CSV file	Exception is raised with the print statement "No account found please try again"	Exception was raised with an invalid account number	No action required
4. (Figure 4)	Unit Testing	edit.py	Testing account_check	Check that account can be	Account number that	Clients' old and updated details	Account is found and	No action i required

			method & set_first_name method	found using the correct account number and that account details are updated on the CSV file	exists in CSV file. new_name is updated in the CSV file.	should be brought up on the screen with account updated within CSV file	old and updated details are shown in the terminal	
5. (Figure 5)	Unit testing	people.py	Testing whether fee is added if account balance is the same as overdraft limit	This test will check whether a £5 fee is added to an account for having the same with account balance as overdraft limit	Account balance = 399 Withdraw = 1 Overdraft limit = 400	No fee should be added to the account	No fee was added to the account	No action is required
6. (Figure 6)	Unit testing	people.py	Testing breach of overdraft limit	This test will check whether a £5 fee is added to the account for going over the arranged overdraft limit	Account balance = 400 Withdraw = 1 Overdraft limit = 400	A £5 fee should be added to the account	A £5 fee was added	No action is required
7. (Figure 7)	Unit testing	people.py	Inputting a String for the withdrawal amount	This test will input a String instead of an integer for the withdrawal amount	Account balance = 401 Withdraw = "Test"	A TypeError should be returned back to the user with no changes made	A TypeError was retured to the user and no changes were made	No action required
8. (Figure 8)	Unit testing	edit.py	Inputting an integer when setting the	This test will input a integer instead of a string	Occupation = 1	A TypeError should be returned back	A TypeError was raised with no	No action required

			occupation in edit_occupation method	value when setting the occupation		to the user with no changes made	changes made	
9. (Figure 9)	Unit testing	edit.py	Inputting a String value in the new occupation	This test will test if the new occupation is updated on the CSV file	Occupation = "Programmer"	Occupation column on the client should be updated	Occupation was updated on the CSV file	No action required

```
aaroncunningham@Aarons-MacBook-Pro c2060506_csc1034_project2_2022 % python3 banking_system/main.py add_account
You just added the account:
                         5500
                               01/12/1964
                                           CEO of Amazon
                                                          6857489
                                                                    -40000
Jeff Bezos Mr
                  Male
Jeff,Bezos,Mr,Male,5500,01/12/1964,CEO of Amazon,6857489,-40000
Figure 1 - Test 1
aaroncunningham@Aarons-MacBook-Pro c2060506_csc1034_project2_2022 % python3 banking_system/main.py add_account
Traceback (most recent call last):
 File "/Users/aaroncunningham/PycharmProjects/c2060506_csc1034_project2_2022/banking_system/main.py", line 20, in <module>
  Jeff_Bazos = clients.Add("Jeff", "Bezos", "Mr", "Male", "5500", "01/12/1964", "CEO of Amazon", 6857489, -40000)
 File "/Users/aaroncunningham/PycharmProjects/c2060506_csc1034_project2_2022/banking_system/edit.py", line 120, in __init__
   raise TypeError("Account number should be an integer")
TypeError: Account number should be an integer
Figure 2 - Test 2
client_to_be_edited = clients.Edit(account=1)
aaroncunningham@Aarons-MacBook-Pro c2060506_csc1034_project2_2022 % python3 banking_system/main.py edit_first_name
***********
```

Figure 3 - Test 3

## Jerry, Astle, Rev, Male, 1898, 11/04/2003, Desktop Support Technician, 3909, -3727 client\_to\_be\_edited = clients.Edit(account=1898) aaroncunningham@Aarons-MacBook-Pro c2060506\_csc1034\_project2\_2022 % python3 banking\_system/main.py edit\_first\_name \* Old account details account details: First name Last name Title Pronoun Account Number Date of birth Occupation Account balance overdraft limit 117 Barde Astle Rev Male 1898 11/04/2003 Desktop Support Technician 3909 -3727 New account details:

117 Jerry Astle Rev Male 1898 11/04/2003 Desktop Support Technician 3909 -3727

First name Last name Title Pronoun Account Number Date of birth

Occupation Account balance overdraft limit

Figure 4 - Test 4

aaroncunningham@Aarons-MacBook-Pro c2060506\_csc1034\_project2\_2022 % python3 banking\_system/main.py withdraw Old account balance: Occupation Account balance overdraft limit First name Last name Title Pronoun Account Number Date of birth 130 Cunningham Male 4999 01/29/1999 Programmer -399 Aaron -400 Last name Title Pronoun Account Number Date of birth Occupation Account balance overdraft limit First name 01/29/1999 Aaron Cunningham 4999 Programmer 130 Male -400 -400 aaroncunningham@Aarons-MacBook-Pro c2060506\_csc1034\_project2\_2022 %

Figure 5 = Test 5

```
aaroncunningham@Aarons-MacBook-Pro c2060506_csc1034_project2_2022 % python3 banking_system/main.py withdraw
Traceback (most recent call last):
    File "/Users/aaroncunningham/PycharmProjects/c2060506_csc1034_project2_2022/banking_system/main.py", line 95, in <module>
        globals()[sys.argv[1]]()
    File "/Users/aaroncunningham/PycharmProjects/c2060506_csc1034_project2_2022/banking_system/main.py", line 46, in withdraw
        known_user.withdraw(withdraw="Test")
    File "/Users/aaroncunningham/PycharmProjects/c2060506_csc1034_project2_2022/banking_system/people.py", line 53, in withdraw
        raise TypeError("Withdrawal amounts should be a integer")
TypeError: Withdrawal amounts should be a integer
```

Figure 7 - Test 7

```
aaroncunningham@Aarons-MacBook-Pro c2060506_csc1034_project2_2022 % python3 banking_system/main.py withdraw
Old account balance:
               Last name Title Pronoun Account Number Date of birth Occupation Account balance overdraft limit
    First name
                                                                       Programmer
130
         Aaron Cunningham
                                   Male
                                                   4999
                                                           01/29/1999
                                                                                              -400
                                                                                                               -400
    First name
               Last name Title Pronoun Account Number Date of birth
                                                                       Occupation Account balance overdraft limit
         Aaron Cunningham
                                                           01/29/1999
                                                                       Programmer
130
                                   Male
                                                   4999
                                                                                              -406
                                                                                                               -400
aaroncunningham@Aarons-MacBook-Pro c2060506_csc1034_project2_2022 % |
```

## Barde, Astle, Rev, Male, 1898, 11/04/2003, Programmer, 3909, -3727

aaroncunningham@Aarons-MacBook-Pro c2060506\_csc1034\_project2\_2022 % python3 banking\_system/main.py edit\_occupation \* Old account details account details: First name Last name Title Pronoun Account Number Date of birth Occupation Account balance overdraft limit 117 1898 -3727 Barde Astle Rev Male 11/04/2003 Desktop Support Technician 3909 New account details: First name Last name Title Pronoun Account Number Date of birth Occupation Account balance overdraft limit 117 Barde Astle Rev Male 1898 11/04/2003 Programmer 3909 -3727 \*

Figure 9 - Test 9