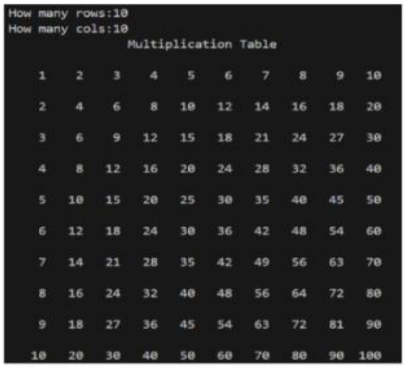
BONILLO, LOREN
C204

Midterm Lab Task 2
Using Functions

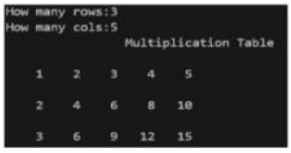
Problem 1.

Create an n x n Multiplication table using **Nested FOR Loop.** The user must enter the number of rows and columns that will be displayed in the Table.

Sample Output 1



Sample Output 2.




```
def generate_multiplication_table(rows, cols):
    print("\n\tMultiplication Table\n")


    for i in range(1, rows + 1):
        for j in range(1, cols + 1):
            print(f"{i * j:4}", end="")
        print()

rows = int(input("How many rows: "))
cols = int(input("How many cols: "))

generate_multiplication_table(rows, cols)
```

Problem 2. Create a bank program that will allow the user to perform the ff: Use Functions as necessary

```
**********************
      ABCCDE ATM
**********************
1.Show Balance
2.Deposit
3.Withdraw
4.Exit
**********************
```

```
Enter your choice (1-4): 1
**********************
Your balance is $0.00
**********************
```

```
**********************
Enter your choice (1-4): 2
**********************
Enter an amount to be deposited: 1000
**********************
```

```
Enter your choice (1-4): 1
**********************
Your balance is $1000.00
**********************
```

```
Enter your choice (1-4): 3
**********************
Enter amount to be withdrawn: 250
**********************
```

```
**********************
Enter your choice (1-4): 1
**********************
Your balance is $750.00
**********************
```

```python
def show_balance(balance):
 print(f"Your balance is ${balance:.2f}")


def deposit(balance):
 amount = float(input("Enter an amount to be deposited: "))
 balance += amount
 print(f"Deposited ${amount:.2f}")
 return balance


def withdraw(balance):
 amount = float(input("Enter amount to be withdrawn: "))
 if amount <= balance:
 balance -= amount
 print(f"Withdrew ${amount:.2f}")
 else:
 print("Insufficient funds")
 return balance


def atm_program():
 balance = 0.00
 while True:
 print("\n********** ABCDE ATM **********")
 print("1. Show Balance")
 print("2. Deposit")
 print("3. Withdraw")
 print("4. Exit")
 print("**************************************")

 choice = int(input("Enter your choice (1-4): "))

 if choice == 1:
 show_balance(balance)
 elif choice == 2:
 balance = deposit(balance)
 elif choice == 3:
 balance = withdraw(balance)
 elif choice == 4:
 print("Thank you for using ABCDE ATM. Goodbye!")
 break
 else:
 print("Invalid choice, please try again.")


atm_program()
```