

Problem 1.

Create an $m \times n$ 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

```
How many rows: 10
How many cols: 10
Multiplication Table

1  2  3  4  5  6  7  8  9  10
2  4  6  8  10 12 14 16 18 20
3  6  9  12 15 18 21 24 27 30
4  8  12 16 20 24 28 32 36 40
5  10 15 20 25 30 35 40 45 50
6  12 18 24 30 36 42 48 54 60
7  14 21 28 35 42 49 56 63 70
8  16 24 32 40 48 56 64 72 80
9  18 27 36 45 54 63 72 81 90
10 20 30 40 50 60 70 80 90 100
```

Sample Output 2.

```
How many rows: 3
How many cols: 5
Multiplication Table

1  2  3  4  5
2  4  6  8  10
3  6  9  12  15
```

```
main.py x
1 usage
2 def multiplicationtable(rows, cols):
3     print("\n\tMultiplication Table\n")
4
5     for i in range(1, rows + 1):
6         for b in range(1, cols + 1):
7             print(f"{i * b:4}", end="")
8         print()
9
10    rows = int(input("How many rows: "))
11    cols = int(input("How many cols: "))
12
13    multiplicationtable(rows, cols)
```

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

```

*****
      ABCDE 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Enter amount to be withdrawn: 250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
*****

```

```

#main.py
1 #usage
2 def show_balance(balance):
3     print(f"Your balance is ${balance:.2f}")
4
5
6 #usage
7 def deposit(balance):
8     amount = float(input("Enter an amount to be deposited: "))
9     balance += amount
10    print(f"Deposited ${amount:.2f}")
11    return balance
12
13
14 #usage
15 def withdraw(balance):
16     amount = float(input("Enter amount to be withdrawn: "))
17     if amount <= balance:
18         balance -= amount
19         print(f"Withdrawn ${amount:.2f}")
20     else:
21         print("Insufficient funds")
22     return balance
23
24
25 #usage
26 def atm_program():
27     balance = 0.00
28     while True:
29         print("\n***** ABCDE ATM *****")
30         print("1. Show Balance")
31         print("2. Deposit")
32         print("3. Withdraw")
33         print("4. Exit")
34         print("*****")
35
36         choice = int(input("Enter your choice (1-4): "))
37
38         if choice == 1:
39             show_balance(balance)
40         elif choice == 2:

```

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

}
ata_program()
```