

James G. Villar

C204

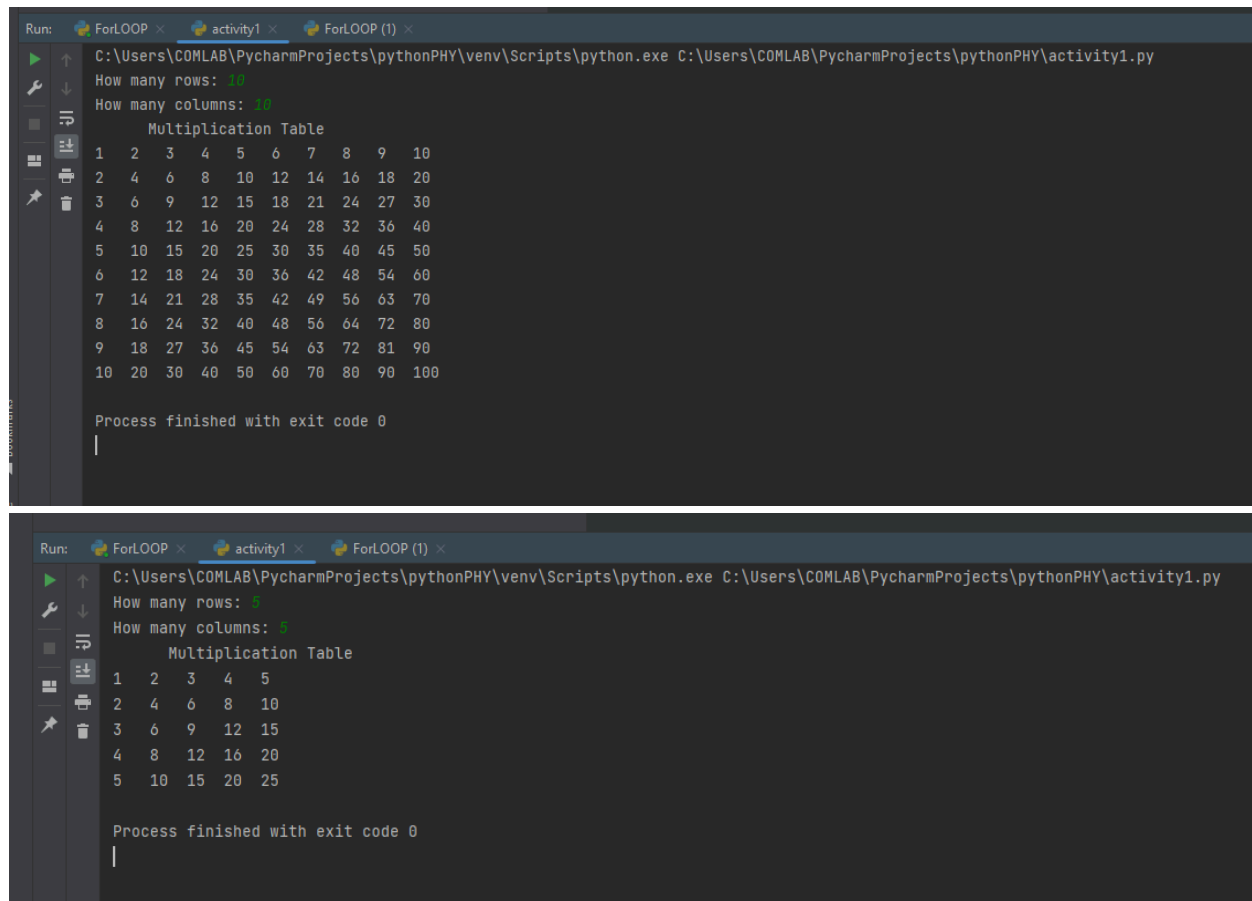
Problem #1: Multiplication Table using Nested Loop

```
#Nested loops

rows = int(input("How many rows: "))
columns = int(input("How many columns: "))
print("\t Multiplication Table ")

for a in range(1, rows+1):
    for b in range(1, columns+1):
        print(a*b, end="\t")
    print()
```

Sample Output:



```
Run: ForLOOP x activity1 x ForLOOP (1) x
C:\Users\COMLAB\PycharmProjects\pythonPHY\venv\Scripts\python.exe C:\Users\COMLAB\PycharmProjects\pythonPHY\activity1.py
How many rows: 10
How many columns: 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

Process finished with exit code 0
|

Run: ForLOOP x activity1 x ForLOOP (1) x
C:\Users\COMLAB\PycharmProjects\pythonPHY\venv\Scripts\python.exe C:\Users\COMLAB\PycharmProjects\pythonPHY\activity1.py
How many rows: 5
How many columns: 5
    Multiplication Table
 1  2  3  4  5
 2  4  6  8 10
 3  6  9 12 15
 4  8 12 16 20
 5 10 15 20 25

Process finished with exit code 0
|
```

Problem#2: Create a Bank Program that will allow the user to perform the ff: Use Functions as necessary

```
main.py
1 #Bank
2
3 def check_balance(balance):
4     print("*****")
5     print(f"Your balance is ${balance:.2f}")
6     print("*****")
7
8 def deposit(balance):
9     amount = float(input("Enter an amount to be deposited: "))
10    balance += amount
11    return balance
12
13 def withdraw(balance):
14    amount = float(input("Enter amount to be withdrawn: "))
15    if amount > balance:
16        print("Insufficient funds!")
17    else:
18        balance -= amount
19    return balance
20
21 def main():
22    balance = 0
23
24    while True:
25        print("*****")
26        print(" ABCCDEF ATM ")
27        print("*****")
28        print("1. Show Balance")
29        print("2. Deposit")
30        print("3. Withdraw")
31        print("4. Exit")
32        print("*****")
33
34        choice = input("Enter your choice (1-4): ")
35
36        if choice == "1":
37            check_balance(balance)
38        elif choice == "2":
39            balance = deposit(balance)
40        elif choice == "3":
41            balance = withdraw(balance)
42        elif choice == "4":
43            print("\nThank you for using ABCCDEF ATM.")
44            break
45        else:
46            print("Invalid choice. Please select 1-4.")
47
48    main()
```

Sample Output:

```
*****
ABCCDEF ATM
*****
1. Show Balance
2. Deposit
3. Withdraw
4. Exit
*****
Enter your choice (1-4): 1
*****
Your balance is $0.00
*****
ABCCDEF ATM
*****
1. Show Balance
2. Deposit
3. Withdraw
4. Exit
*****
Enter your choice (1-4): 2
Enter an amount to be deposited: 1000
*****
ABCCDEF ATM
*****
1. Show Balance
2. Deposit
3. Withdraw
4. Exit
*****
```

```
*****
Enter your choice (1-4): 1
*****
Your balance is $1000.00
*****
ABCCDEF ATM
*****
1. Show Balance
2. Deposit
3. Withdraw
4. Exit
*****
Enter your choice (1-4): 3
Enter amount to be withdrawn: 250
*****
ABCCDEF ATM
*****
1. Show Balance
2. Deposit
3. Withdraw
4. Exit
*****
Enter your choice (1-4): 1
*****
Your balance is $750.00
*****
ABCCDEF ATM
*****
1. Show Balance
2. Deposit
3. Withdraw
4. Exit
*****
Enter your choice (1-4): 4

Thank you for using ABCCDEF ATM.
```