

C204

Problem 1

```
1 rows = int(input("How many rows: "))
2 cols = int(input("How many cols: "))
3 print("Multiplication table")
4
5 for i in range(1, rows + 1):
6     for j in range(1, cols + 1):
7         print(f"{i * j:4}", end=" ")
8     print()
```

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
```

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
```

Problem 2

```
1 balance = 600
2
3 def show_balance():
4     print(f"Your balance is {balance:.2f}")
5
6 def deposit():
7     global balance
8     amount = float(input("Enter amount to be deposited: "))
9     balance += amount
10    print(f"Your balance is {balance:.2f}")
11
12 def withdraw():
13     global balance
14     amount = float(input("Enter amount to be withdraw: "))
15     if amount > balance:
16         print("Insufficient funds.")
17     else:
18         balance -= amount
19         print(f"Your balance is {balance:.2f}")
20
21 def atm_menu():
22     while True:
23         print("\nABCCDE ATM")
24         print("*****")
25         print("1. Show Balance")
26         print("2. Deposit")
27         print("3. Withdraw")
28         print("4. Exit")
29         print("*****")
30         choice = input("Enter your choice (1-4): ")
31
32         if choice == '1':
33             show_balance()
34         elif choice == '2':
35             deposit()
36         elif choice == '3':
37             withdraw()
38         elif choice == '4':
39             print("Thank you for using ABCODEE ATM!")
40             break
41         else:
42             print("Invalid choice. Please enter a number from 1 to 4.")
43
44
45 atm_menu()
```

Outputs

```
ABCCDE ATM
*****
1. Show Balance
2. Deposit
3. Withdraw
4. Exit
< *****
Enter your choice (1-4):
```

```
Enter your choice (1-4): 1
Your balance is 600.00

ABCCDE ATM
*****
1. Show Balance
2. Deposit
3. Withdraw
4. Exit
*****
Enter your choice (1-4):
```

```
Enter your choice (1-4): 2
Enter amount to be deposited: 6721
Your balance is 7321.00

ABCCDE ATM
*****
1. Show Balance
2. Deposit
3. Withdraw
4. Exit
*****
Enter your choice (1-4):
```

```
Enter your choice (1-4): 3
Enter amount to be withdraw: 4312
Your balance is 3009.00

ABCCDE ATM
*****
1. Show Balance
2. Deposit
3. Withdraw
4. Exit
*****
Enter your choice (1-4):
```

```
Enter your choice (1-4): 4
Thank you for using ABCODEE ATM!
```