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BSCS-C204

Problem 1:

```
def multiplication_table(rows, cols):
    print("\nMultiplication Table\n")
    for i in range(1, rows + 1):
        for j in range(1, cols + 1):
            print(i * j, end="\t")
        print()

def main():
    rows = int(input("How many rows: "))
    cols = int(input("How many cols: "))
    multiplication_table(rows, cols)

if __name__ == "__main__":
    main()
```

Output:

```
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
```

Problem 2:

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

```

def deposit(balance):
    amount = float(input("Enter an amount to be deposited: "))
    balance += amount
    return balance

def withdraw(balance):
    amount = float(input("Enter amount to be withdrawn: "))
    if amount > balance:
        print("Insufficient funds!")
    else:
        balance -= amount
    return balance

def main():
    balance = 0.0
    while True:
        print("\nABCCDE ATM")
        print("*****")
        print("1. Show Balance")
        print("2. Deposit")
        print("3. Withdraw")
        print("4. Exit")
        print("*****")

        choice = 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 ABCCDE ATM!")
            break
        else:
            print("Invalid choice. Please select 1-4.")

if __name__ == "__main__":
    main()

```

Output:

```
ABCCDE ATM
*****
1. Show Balance
2. Deposit
3. Withdraw
4. Exit
*****
Enter your choice (1-4): 2
Enter an amount to be deposited: 1500
```

```
ABCCDE ATM
*****
1. Show Balance
2. Deposit
3. Withdraw
4. Exit
*****
Enter your choice (1-4): 1
*****
Your balance is $1500.00
*****
```

```
ABCCDE ATM
*****
1. Show Balance
2. Deposit
3. Withdraw
4. Exit
*****
Enter your choice (1-4): 3
Enter amount to be withdrawn: 1000
```

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