

## Part 1

### Multiply Program

```
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()
```

### Sample Output

```
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
```

## Part 2

### Bank program

```
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    amount = float(input("Enter amount to be withdrawn: "))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): 1
```

```
*****
Your balance is $0.00
*****
```

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

```
Enter an amount to be deposited: 200
```

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