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**BSCS-C204**

## Problem 1.

## Code

```
rows = int(input("How many rows:"))
columns = int(input("How many cols:"))
print("\t\tMultiplication Table")

for a in range(1,rows +1):
    for b in range(1, columns +1):
        print(f"{a * b:5d}", end = " ")
    print("\n")
```

**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


...Program finished with exit code 0
Press ENTER to exit console.
```

## Problem 2.

## Code

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

def deposit(balance):
    print("*****************************")
    amount = float(input("Enter an amount to be deposited: "))
    balance += amount
    print("*****************************")
    print(f"Your balance is ${balance:.2f}")
    return balance

def withdraw(balance):
    print("*****************************")
    amount = float(input("Enter amount to be withdrawn: "))
    if amount > balance:
        print("*****************************")
        print("Insufficient funds.")
    else:
        balance -= amount
        print("*****************************")
        print(f"Your balance is ${balance:.2f}")
    return balance


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

        choice = int(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("*****************************")
            print("Exiting. Thank you for using ABCDE ATM.")
            break
        else:
            print("*****************************")
            print("Invalid choice. Please try again.")


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

Sample Output