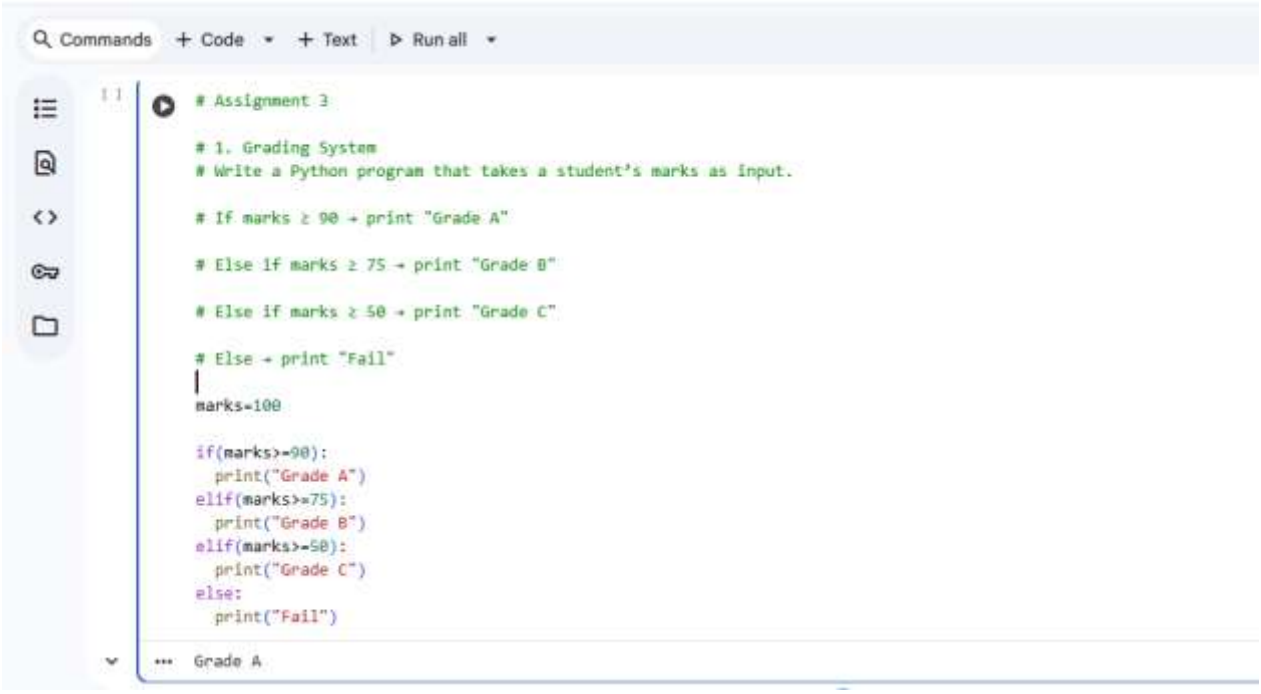
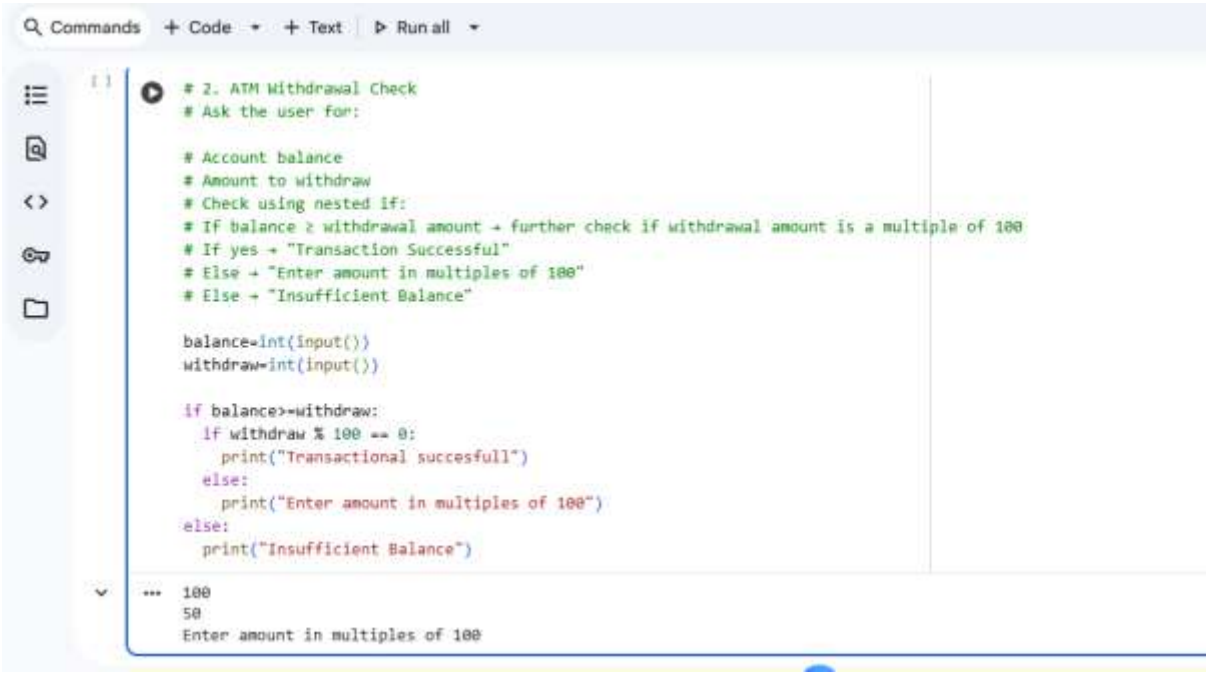
Day 6-6-11-2025| Assignment 3



```
# Assignment 3

# 1. Grading System
# Write a Python program that takes a student's marks as input.

# If marks ≥ 90 → print "Grade A"

# Else if marks ≥ 75 → print "Grade B"

# Else if marks ≥ 50 → print "Grade C"

# Else → print "Fail"

marks=100

if(marks>=90):
  print("Grade A")
elif(marks>=75):
  print("Grade B")
elif(marks>=50):
  print("Grade C")
else:
  print("Fail")
```

```
Grade A
```



```
# 2. ATM Withdrawal Check
# Ask the user for:

# Account balance
# Amount to withdraw
# Check using nested if:
# If balance ≥ withdrawal amount → further check if withdrawal amount is a multiple of 100
# If yes → "Transaction Successful"
# Else → "Enter amount in multiples of 100"
# Else → "Insufficient Balance"

balance=int(input())
withdraw=int(input())

if balance>=withdraw:
  if withdraw % 100 == 0:
    print("Transactional succesfull")
  else:
    print("Enter amount in multiples of 100")
else:
  print("Insufficient Balance")
```

```
100
50
Enter amount in multiples of 100
```

```python
# 3. Triangle Type Checker
# Take three sides of a triangle as input.
# First check if it forms a valid triangle (a+b > c, b+c > a, a+c > b).
# If valid, then check:
# If all sides are equal → "Equilateral"
# Else if two sides are equal → "Isosceles"
# Else → "Scalene"
# Else → "Not a Triangle"
a = int(input("Enter first side: "))
b = int(input("Enter second side: "))
c = int(input("Enter third side: "))

if (a + b > c) and (b + c > a) and (a + c > b):
    if a == b and b == c:
        print("Equilateral")
    elif a == b or b == c or a == c:
        print("Isosceles")
    else:
        print("Scalene")
else:
    print("Not a Triangle")
```

```
Enter first side: 4
Enter second side: 4
Enter third side: 5
Isosceles
```

```python
# 4. Voting Eligibility
# Ask the user for age and citizenship (Indian/Other).

# If age ≥ 18
# If citizenship is Indian → "Eligible to Vote"
# Else → "Not Eligible (Non-Citizen)"
# Else → "Not Eligible (Underage)"

age = int(input("Enter your age: "))
citizenship = input("Enter your citizenship (Indian/Other): ")
pc=citizenship.lower()

if (age >= 18 and citizenship == "India"):
  if(age>=18):
    if(citizenship>="India"):
        print("Eligible to Vote")
    else:
        print("Not Eligible (Non-Citizen)")
else:
    print("Not Eligible (Underage)")
```

```
Enter your age: 19
Enter your citizenship (Indian/Other): India
Eligible to Vote
```

```
# 5. Discount Calculator
# Take the total bill amount as input.
# If bill ≥ 5000
# If bill ≥ 10000 → give 20% discount
# Else → give 10% discount
# Else
# If bill ≥ 2000 → give 5% discount
# Else → "No Discount"

bill=float(input())

if bill >= 5000:
    if bill >= 10000:
        discount =bill * 0.20
    else:
        discount =bill * 0.10
elif bill >= 2000:
    discount =bill * 0.05
else:
    discount =bill * 0.0

if discount > 0:
    discounted_amount = bill * (1 - discount)
    print(f"Discount applied: {discount*100}%")
    print(f"Total payable amount after discount: {discounted_amount}")
```

```
else:
    print("No Discount")
```

```
3500
Discount applied: 5.0%
Total payable amount after discount: 3325.0
```

```
Start coding or generate with AI.
```