# 1. E-commerce Discount Calculator

# Scenario: An online store offers discounts based on the purchase amount:

# 10% discount for purchases between $100 and $500

# 20% discount for purchases above $500

# No discount for purchases below $100

# Task: Write a program that takes the purchase amount as input and calculates the discount and final amount to be paid.

**Program:**

purchase\_amount=float(input("the purchase amount:$"))

discount=0

if(purchase\_amount>=100 and purchase\_amount<=500):

    print("you got 10% discount")

    after\_discount=purchase\_amount\*0.10

    print(after\_discount)

    final\_amount=purchase\_amount-after\_discount

    print(final\_amount)

    print("final amount need to pay:",final\_amount)

elif(purchase\_amount>500):

    print("you got 20% discount")

    after\_discount=purchase\_amount\*0.20

    print(after\_discount)

    final\_amount=purchase\_amount-after\_discount

    print("final amount need to pay:",final\_amount)

else:

    print("no discount")

# 2. Traffic Light Simulation

# Scenario: Create a program that simulates a traffic light. The user inputs one of the colors: Red, Yellow, or Green. Based on the input:

# If the input is Red, display "Stop."

# If the input is Yellow, display "Ready to move."

# If the input is Green, display "Go."

# For invalid input, display "Invalid color."

# Program:

colour=str(input("enter the colour:"))

clr=colour.lower()

if(clr=="red"):

    print("stop")

elif(clr=="yellow"):

    print("ready to move")

elif(clr=="green"):

    print("go")

else:

    print("invalid colour")

# 3. Grade Evaluation System

# Scenario: A school uses the following grading system:

# Marks >= 90: Grade A

# Marks >= 75 and < 90: Grade B

# Marks >= 50 and < 75: Grade C

# Marks < 50: Fail

# Task: Write a program that accepts the student's marks and displays their grade

**Program:**

marks=float(input("enter the marks:"))

if(marks>=90):

    print("grade A")

elif(marks>=75 and marks<90):

    print("grade B")

elif(marks>=50 and marks<75):

    print("grade C")

else:

    print("FAIL")

# 4. Odd or Even and Divisibility Check

# Scenario: Write a program that takes an integer as input and checks:

# Whether the number is odd or even

# Whether the number is divisible by 5

# Display appropriate messages for both conditions."""

**Program:**

**num=int(input("enter the number:"))**

**if(num%2==0):**

**print("it is a even number")**

**else:**

**print("it is odd num")**

**if(num%5==0):**

**print("it is divisible by 5")**

**else:**

**print("not divisible by 5")**

# 5. Password Strength Checker

# Scenario: Write a program that checks the strength of a password based on these rules:

# Length >= 8 characters: Strong

# Length between 5 and 7 characters: Medium

# Length < 5 characters: Weak"""

**Program:**

password=str(input("enter the password:"))

l=len(password)

if(l>8):

    print("the password you are give is strong")

elif(l<=8 and l>=5):

    print("the password you are give is medium")

else:

    print("the password is weak")

# 6. Electricity Bill Calculator

# Scenario: An electricity company charges its customers as follows:

# First 100 units: $0.5 per unit

# Next 100 units (101-200): $0.75 per unit

# Above 200 units: $1 per unit

# Task: Write a program that accepts the number of units consumed and calculates the total bill."""

**Program:**

units=float(input("enter the number of units:"))

if(units<=100):

    print("per unit cost is $0.5")

    ele\_bill=units\*0.5

    print("your electricity bill is:$",ele\_bill)

elif(units<=200 and units>100):

    print("per unit cost is 0.75")

    ele\_bill=units\*0.75

    print("your electricity bill is:$",ele\_bill)

else:

    print("above 200 units the unit cost is $1")

    ele\_bill=units\*1

    print("your electricity bill is:$",ele\_bill)

# 7. Eligibility for Loan Approval

# Scenario: A bank approves loans based on these conditions:

# Age should be between 21 and 60

# Monthly income should be greater than or equal to $5000

# Task: Write a program to check whether a person is eligible for the loan based on their age and monthly income."""

**Program:**

age=int(input("enter the age:"))

income=float(input("enter the income $:"))

if((age>=21 and age<=60) and (income>=5000)):

    print("candidate is eligible for loan")

else:

    print(" candidate is not eligible for loan")

# """8. Temperature Alert System

# Scenario: A weather monitoring system alerts based on the temperature:

# Below 0°C: "Freezing weather"

# 0°C to 20°C: "Cold weather"

# 21°C to 30°C: "Warm weather"

# Above 30°C: "Hot weather"

# Task: Write a program that takes the temperature as input and displays the corresponding alert message."""

**Program:**

temp=float(input("enter the temp °c:"))

range(10\*\*100)

if(temp in range(0,20)):

    print("cold wheather")

elif(temp in range(21,30)):

    print("warm wheather")

else:

    print("hot wheather")