**EXERCISES**

# Q1. Write a program to check if a given number is Positive, Negative or Zero.

num = int(input("Q1. Enter a number: "))

if num > 0:

print("Positive")

elif num < 0:

print("Negative")

else:

print("Zero")

# Q2. Write a program to check if a given number is odd or even.

num = int(input("Q2. Enter a number: "))

if num % 2 == 0:

print("Even")

else:

print("Odd")

# Q3. Given two non-negative values, print true if they have the same last digit

a = int(input("Q3. Enter first number: "))

b = int(input("Enter second number: "))

if a % 10 == b % 10:

print("True")

else:

print("False")

# Q4. Write a program to print numbers from 1 to 10 in a single row with one tab space.

print("Q4. Numbers from 1 to 10:")

for i in range(1, 11):

print(i, end='\t')

print()

# Q5. Write a program to print even numbers between 23 and 57.

print("Q5. Even numbers between 23 and 57:")

for i in range(23, 58):

if i % 2 == 0:

print(i)

# Q6. Write a program to check if a given number is prime or not.

num = int(input("Q6. Enter a number: "))

if num > 1:

for i in range(2, int(num\*\*0.5)+1):

if num % i == 0:

print("Not Prime")

break

else:

print("Prime")

else:

print("Not Prime")

# Q7. Write a program to print prime numbers between 10 and 99.

print("Q7. Prime numbers between 10 and 99:")

for num in range(10, 100):

if num > 1:

for i in range(2, int(num\*\*0.5)+1):

if num % i == 0:

break

else:

print(num)

# Q8. Write a program to print the sum of all the digits of a given number.

num = int(input("Q8. Enter a number: "))

total = 0

temp = num

while temp > 0:

digit = temp % 10

total += digit

temp //= 10

print("Sum of digits:", total)

# Q9. Write a program to reverse a given number and print.

num = int(input("Q9. Enter a number to reverse: "))

rev = 0

temp = num

while temp > 0:

digit = temp % 10

rev = rev \* 10 + digit

temp //= 10

print("Reversed number:", rev)

# Q10. Write a program to find if the given number is palindrome or not.

num = int(input("Q10. Enter a number to check palindrome: "))

temp = num

rev = 0

while temp > 0:

digit = temp % 10

rev = rev \* 10 + digit

temp //= 10

if rev == num:

print("Palindrome")

else:

print("Not Palindrome"

**MINI PROJECT**

# Mini Project 1:

# Ask user how far they want to travel and suggest Bicycle, Motorcycle, or Super-Car.

distance = int(input("\nMini Project 1:\nHow far would you like to travel in miles? "))

if distance < 3:

print("I suggest Bicycle to your destination")

elif distance < 300:

print("I suggest Motor-cycle to your destination")

else:

print("I suggest Super-Car to your destination")

# Mini Project 2:

# Calculate cloud server cost per day, week, month and how many days with $918

hourly\_cost = 0.51

cost\_per\_day = hourly\_cost \* 24

cost\_per\_week = cost\_per\_day \* 7

cost\_per\_month = cost\_per\_day \* 30

budget = 918

days\_operated = budget // cost\_per\_day

print("\nMini Project 2:")

print("Cost to operate one server per day: $", round(cost\_per\_day, 2))

print("Cost to operate one server per week: $", round(cost\_per\_week, 2))

print("Cost to operate one server per month: $", round(cost\_per\_month, 2))

print("Number of days you can operate with $918:", int(days\_operated))