print ("Q1")

a=8

b=78

if a>b:

print(" the greater is " , a)

print(" the smaller is " , b)

else :

print(" the greater is " , b)

print(" the smaller is " , a)

print ("Q2")

a=11

b=9

c=5

largest = a

smallest = a

if b>largest:

largest = b

if c> largest:

largest = c

if b<smallest:

smallest = b

if c<smallest :

smallest =c

print ("the smallest among the three is ", smallest)

print ("the largest among the three is ", largest)

print ("Q3")

a = int(input("enter a number"))

if a % 2 == 0:

print ("the entered number is even")

else :

print ("the entered number is odd")

print ("Q4")

num = int(input("enter a number"))

if num % 10 == 0:

print ("the entered number is divisible by 10")

else :

print ("the entered number is not divisible by 10")

print ("Q5")

age = int(input("enter a number:"))

if age <18:

print ("the person is minor ")

else :

print ("the person is major ")

print ("Q6")

num= int(input("enter a number:"))

count = 0

if num<0:

num = -num

while num>0:

num//=10

count+=1

print ("the number of digits is " , count)

print ("Q7")

year= int(input("enter a number:"))

if year % 4 ==0:

print ("the year is lep year")

else :

print ("the year is not leap year")

#print("Q8")

s1 = int(input("enter the 1st angle"))

s2 = int(input("enter the 2st angle"))

s3 = int(input("enter the 3st angle"))

if s1+s2+s3 == 180:

print ("the triangle is possible")

else :

print ("the triangle is not possible ")

print ("Q9")

num = float(input("Enter a number: "))

if num < 0:

abs\_value = -num

else:

abs\_value = num

print(f"The absolute value of the given number is:", abs\_value)

print("Q10")

length = int(input("Enter the length of the rectangle: "))

breadth = int(input("Enter the breadth of the rectangle: "))

area = length \* breadth

perimeter = 2 \* (length + breadth)

if area > perimeter:

print("The area of the rectangle is greater than its perimeter.")

else:

print("The area of the rectangle is not greater than its perimeter.")

print ("Q11")

x1, y1 = map(float, input("Enter the coordinates of the first point (x1, y1): ").split())

x2, y2 = map(float, input("Enter the coordinates of the second point (x2, y2): ").split())

x3, y3 = map(float, input("Enter the coordinates of the third point (x3, y3): ").split())

if (y2 - y1) \* (x3 - x2) == (y3 - y2) \* (x2 - x1):

print("The three points lie on a straight line.")

else:

print("The three points do not lie on a straight line.")

print ("Q12"import math

x\_center, y\_center = map(float, input("Enter the coordinates of the center of the circle (x,

y): ").split())

radius = float(input("Enter the radius of the circle: "))

x\_point, y\_point = map(float, input("Enter the coordinates of the point (x, y): ").split())

distance = math.sqrt(pow(x\_point - x\_center, 2) + pow(y\_point - y\_center, 2))

if distance < radius:

print("The point lies inside the circle.")

elif distance == radius:

print("The point lies on the circle.")

else:

print("The point lies outside the circle.")

print ("Q13")

a= int(input("enter a number in between 0 to 19 :"))

words = {

0: "zero", 1: "one", 2: "two", 3: "three", 4: "four",

5: "five", 6: "six", 7: "seven", 8: "eight", 9: "nine",

10: "ten", 11: "eleven", 12: "twelve", 13: "thirteen", 14: "fourteen",

15: "fifteen", 16: "sixteen", 17: "seventeen", 18: "eighteen", 19: "nineteen" }

if 0 <= num <= 19:

print("The given numberis written as ", words[a])

else:

print("Please enter a number between 0 and 19.")

print ("Q14")

def get\_grade(marks):

if marks == "NA":

return "NA"

elif marks <= 39:

return "F"

elif marks <= 44:

return "P"

elif marks <= 49:

return "C"

elif marks <= 54:

return "B"

elif marks <= 59:

return "B+"

elif marks <= 69:

return "A"

elif marks <= 79:

return "A+"

elif marks <= 100:

return "O"

return "Invalid Marks"

marks1 = input("Enter marks for subject 1 (or 'NA' if absent): ")

marks2 = input("Enter marks for subject 2 (or 'NA' if absent): ")

marks3 = input("Enter marks for subject 3 (or 'NA' if absent): ")

if marks1 != "NA":

marks1 = int(marks1)

if marks2 != "NA":

marks2 = int(marks2)

if marks3 != "NA":

marks3 = int(marks3)

if (marks1 != "NA" and marks1 <= 39) or (marks2 != "NA" and marks2 <= 39) or (marks3 !=

"NA" and marks3 <= 39):

result = "Fail"

else:

result = "Pass"

total = 0

count = 0

if marks1 != "NA":

total += marks1

count += 1

if marks2 != "NA":

total += marks2

count += 1

if marks3 != "NA":

total += marks3

count += 1

average = total / count if count > 0 else 0

print("\n Total Marks: {total}")

print("Average Marks: {average:.2f}")

print("Result: {result}")

print("\n Grades:")

print("Subject 1: {get\_grade(marks1)}")

print("Subject 2: {get\_grade(marks2)}")

print("Subject 3: {get\_grade(marks3)}")

Python 3.12.8 (v3.12.8:2dc476bcb91, Dec 3 2024, 14:43:19) [Clang 13.0.0 (clang

1300.0.29.30)] on darwin

Type "help", "copyright", "credits" or "license()" for more information.

========================================================================

RESTART: /Users/is/Documents/assisgnment 2.py

=======================================================================

Q1

the greater is 78

the smaller is 8

========================================================================

RESTART: /Users/: is /Documents/assisgnment 2.py

=======================================================================

Q2

the smallest among the three is 5

the largest among the three is 11

========================================================================

RESTART: /Users/is/Documents/assisgnment 2.py

=======================================================================

Q3

enter a number89

the entered number is odd

========================================================================

RESTART: /Users/is/Documents/assisgnment 2.py

=======================================================================

Q4

enter a number

========================================================================

RESTART: /Users/is/Documents/assisgnment 2.py

=======================================================================

Q4

enter a number54

the entered number is not divible by 10

========================================================================

RESTART: /Users/is/Documents/assisgnment 2.py

=======================================================================

Q5

enter a number:7

the peerson is minor

========================================================================

RESTART: /Users/is/Documents/assisgnment 2.py

=======================================================================

Q5

enter a number:67

the person is major

============= RESTART: /Users/is/Documents/assisgnment 2.py ============

Q6

enter a number:6537

the number of digits is 4

========================================================================

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=======================================================================

Q6

enter a number:8425793

the number of digits is 7

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=======================================================================

Q7

enter a number:2014

the year is not leap year

========================================================================

RESTART: /Users/is/Documents/assisgnment 2.py

=======================================================================

Q7

enter a number:2020

the year is lep year

========================================================================

RESTART: /Users/is/Documents/assisgnment 2.py

=======================================================================

Q8

enter the 1st angle40

enter the 2st angle60

enter the 3st angle80

the triangle is possible