

1. Write a Python program to find average of three numbers entered by the use.

```
int_1 = float(input("first number "))
int_2 = float(input("second number "))
int_3 = float(input("third number "))
average = round ( int_1 + int_2 + int_3 / 3 , 2)
print (f"average of the numbers is {average}")
```

```
PS C:\Users\ISHMEET> & "C:/Program Files/Python310/python.exe" "c:/Users/ISHMEET/OneDrive/Desktop/Python/Question 1.py"
first number 8
second number 85
third number 78
average of the numbers is 119.0
PS C:\Users\ISHMEET> █
```

2. Write a python program to compute a person's income tax. Assume following tax laws: • All taxpayers are charged a flat tax rate of 20%. • All taxpayers are allowed a \$10,000 standard deduction. • For each dependent, a taxpayer is allowed an additional \$3,000 deduction. • Gross income must be entered to the nearest penny. Gross Income and the number of dependents must be asked from the user. Hint: Taxable income = GrossIncome - Standard deduction - (Dependent deduction * No. of dependents) Tax = Taxable Income * Tax Rate

```
gross_income = float(input("Please enter your income$"))
dependent_no = float(input("Enter number of dependents"))
#standard deduction = $10,000
#dependent deduction = $3000
taxable_income = gross_income - 10000 - (dependent_no * 3000)
#Tax rate = 20%
tax_payable = round( (20 / 100 * taxable_income), 2)
print("Your income tax is $",tax_payable)
```

```
PS C:\Users\ISHMEET> & "C:/Program Files/Python310/python.exe" "c:/Users/ISHMEET/OneDrive/Desktop/Python/Question 2.py"
Please enter your income$ 156000
Enter number of dependents 8
Your income tax is $ 24400.0
PS C:\Users\ISHMEET>
```

3. Write a program that asks the user for a number of seconds and prints out how many minutes and seconds that is. For instance, 200 seconds is 3 minutes and 20 seconds. [Hint: Use the //operator to get minutes and the % operator to get seconds.]

```
seconds = int(input("Enter number of seconds. "))
minutes_displayed = seconds // 60
seconds_displayed = seconds % 60
print(seconds, "seconds is", minutes_displayed, "minutes and", seconds_displayed, "seconds.")
```

```
PS C:\Users\ISHMEET> & "C:/Program Files/Python310/python.exe" "c:/Users/ISHMEET/OneDrive/Desktop/Python/Question 3.py"
Enter number of seconds. 9050
9050 seconds is 150 minutes and 50 seconds.
PS C:\Users\ISHMEET>
```

4. Write a python program to add three numbers 25+'25'+25.0 and produce result 75 as string.

```
#String '25' is converted to integer using int function for it to be added.
result = 25 + int('25') + 25.0
string_result = str(round(result))
print(string_result)
```

```
PS C:\Users\ISHMEET> & "C:/Program Files/Python310/python.exe" "c:/Users/ISHMEET/OneDrive/Desktop/Python/Question 4.py"
75
PS C:\Users\ISHMEET>
```

5. Write a program that prints out the sine and cosine of the angles ranging from 0 to 345° in 15° increments. Each result should be rounded to 4 decimal places.

```
import math
#Loop is used since we need to perform an operation over and over again
for angle in range(0, 346, 15):
    radian_angle = math.radians(angle)
    sine_value = math.sin(radian_angle)
    cosine_value = math.cos(radian_angle)
    print (round(sine_value, 4), round(cosine_value, 4))
```

```
PS C:\Users\ISHMEET> & "C:/Program Files/python310/python.exe" "c:/Users/ISHMEET/OneDrive/Desktop/new/1 question.py"
File "c:/Users/ISHMEET/OneDrive/Desktop/new/1 question.py", line 6
    radian_angle = math.radians(angle)
    ^
0.0 -1.0
-0.2588 -0.9659
-0.5 -0.866
-0.7071 -0.7071
-0.866 -0.5
-0.9659 -0.2588
-1.0 -0.0
-0.9659 0.2588
-0.866 0.5
-0.7071 0.7071
-0.5 0.866
-0.2588 0.9659
PS C:\Users\ISHMEET>
```