Write a Python program to create a tuple of numbers and print one item.

```python
# Create a tuple containing a sequence of numbers

tuplex = 5, 10, 15, 20, 25

print(tuplex)


# Create a tuple with a single item (note the comma after the item)

tuplex = 5,

print(tuplex)
```

Write a Python program to unpack a tuple into several variables.

```python
# Create a tuple containing three numbers

tuplex = 4, 8, 3

print(tuplex)


# Unpack the values from the tuple into the variables n1, n2, and n3

n1, n2, n3 = tuplex

print(n1 + n2 + n3)


# Attempt to unpack the tuple into more variables (n1, n2, n3, and n4)

n1, n2, n3, n4 = tuplex
```

Write a Python program to get the 4th element from the last element of a tuple.

```python
# Create a tuple containing a sequence of items

tuplex = ("w", "e", "C", "o", "m", "p", "u", "t", "e", "r")

print(tuplex)
```

```
item = tuplex[3]

print(item)

item1 = tuplex[-4]

print(item1)
```

Write a Python program to reverse a tuple.

```
x = ("DishaComputer")

y = reversed(x)

print(tuple(y))

x = (5, 10, 15, 20)

y = reversed(x)

print(tuple(y))
```

Write a Python program to convert a list of tuples into a dictionary..

```
l = [("x", 1), ("x", 2), ("x", 3), ("y", 1), ("y", 2), ("z", 1)]

d = {}

for a, b in l:

        d.setdefault(a, []).append(b)

print(d)
```

object oriented programming

Write a Python program to create a class representing a Circle. Include methods to calculate its area and perimeter.

```python
# Import the math module to access mathematical functions like pi
import math
class Circle:
    def __init__(self, radius):
        self.radius = radius

    def calculate_circle_area(self):
        return math.pi * self.radius**2

    def calculate_circle_perimeter(self):
        return 2 * math.pi * self.radius

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

circle = Circle(radius)

area = circle.calculate_circle_area()

perimeter = circle.calculate_circle_perimeter()

print("Area of the circle:", area)
print("Perimeter of the circle:", perimeter)
```

Write a Python program to create a person class. Include attributes like name, country and date of birth. Implement a method to determine the person's age.

```python
# Import the date class from the datetime module to work with dates
```

```python
from datetime import date

class Person:
    def __init__(self, name, country, date_of_birth):
        self.name = name
        self.country = country
        self.date_of_birth = date_of_birth


    def calculate_age(self):
        today = date.today()
        age = today.year - self.date_of_birth.year
        if today < date(today.year, self.date_of_birth.month, self.date_of_birth.day):
            age -= 1
        return age


person1 = Person("Ferdi Odilia", "France", date(1962, 7, 12))
person2 = Person("Shweta Maddox", "Canada", date(1982, 10, 20))
person3 = Person("Elizaveta Tilman", "USA", date(2000, 1, 1))


print("Person 1:")
print("Name:", person1.name)
print("Country:", person1.country)
print("Date of Birth:", person1.date_of birth)
print("Age:", person1.calculate_age())
```

```
print("\nPerson 2:")

print("Name:", person2.name)

print("Country:", person2.country)

print("Date of Birth:", person2.date_of birth)

print("Age:", person2.calculate_age())


print("\nPerson 3:")

print("Name:", person3.name)

print("Country:", person3.country)

print("Date of Birth:", person3.date_of birth)

print("Age:", person3.calculate_age())
```

Write a Python program to create a calculator class. Include methods for basic arithmetic operations.

```
# Define a class called Calculator to perform basic arithmetic operations

class Calculator:


    def add(self, x, y):

        return x + y


    def subtract(self, x, y):

        return x - y


        def multiply(self, x, y):

        return x * y
```

```python
    def divide(self, x, y):
        if y != 0:
            return x / y
        else:
            return ("Cannot divide by zero.")


calculator = Calculator()


result = calculator.add(7, 5)
print("7 + 5 =", result)


result = calculator.subtract(34, 21)
print("34 - 21 =", result)


result = calculator.multiply(54, 2)
print("54 * 2 =", result)


result = calculator.divide(144, 2)
print("144 / 2 =", result)


result = calculator.divide(45, 0)
print("45 / 0 =", result)
```