```python
class Course:
    def __init__(self,course_code,course_name,credit_hours):
        self.course_code=course_code
        self.course_name=course_name
        self.credit_hours=credit_hours


class CoreCourse:
    def __init__(self,course_code,course_name,credit_hours,required_for_major):
        self.course_code=course_code
        self.course_name=course_name
        self.credit_hours=credit_hours
        self.required_for_major=required_for_major


class ElectiveCourse:
    def __init__(self,course_code,course_name,credit_hours,elective_type):
        self.course_code = course_code
        self.course_name = course_name
        self.credit_hours = credit_hours
        self.elective_type=elective_type


a=CoreCourse('CS1001','Introduction to Computer Science',3,True)
b=ElectiveCourse('AS1001','Introduction to Arts',3,'Arts')
print("CoreCourse:")
print("course_code :",a.course_code)
print("course_name :",a.course_name)
print("credit_hours:",a.credit_hours)
print("required_for_major:",a.required_for_major)
```

ElectiveCourse > __init__()

Run: TASKS ×

Version Control   ▶ Run   Python Packages   TODO   Python Console   Problems   Terminal   Services

Download pre-built shared indexes: Reduce the indexing time and CPU load with pre-built Python packages shared indexes // Always download // D

File   Edit   View   Navigate   Code   Refactor   Run   Tools   VCS   Window   Help   pythonProject - TASKS.

pythonProject   TASKS.py

TASKS.py ✕   Class.py ✕

```
280    print("required_for_major:"___a.required_for_major)
281
282    print("\nElectiveCourse:")
283    print("course_code :"___b.course_code)
284    print("course_name :"___b.course_name)
285    print("credit_hours:"___b.credit_hours)
286    print("elective_type:"___b.elective_type)
287
288
```

Run: TASKS ✕

```
C:\Users\anusr\PycharmProjects\pythonProject\venv\Scripts\python.exe C
CoreCourse:
course_code : CS1001
course_name : Introduction to Computer Science
credit_hours: 3
required_for_major: True

ElectiveCourse:
course_code : AS1001
course_name : Introduction to Arts
credit_hours: 3
elective_type: Arts

Process finished with exit code 0
```

```python
# that inherits from Shape and implements its own version of the area() and perimeter() methods.

class Shape:
    def Area(self):
        self.Area()
    def Perimeter(self):
        self.Perimeter()
class Rectangle(Shape):
    def __init__(self,l,b):
        self.l=l
        self.b=b
        self.Area=l*b
        self.Perimeter=2*(l+b)


A=Rectangle(5,3)
print("Area =",A.Area)
print("Perimeter =",A.Perimeter)
```

Run: Class ✕

```
C:\Users\anusr\PycharmProjects\pythonProject\venv\Scripts\python.exe C:\Users\anusr\PycharmProjects
Area = 15
Perimeter = 16


Process finished with exit code 0
```

Version Control   ▶ Run   🗁 Python Packages   ☰ TODO   🐍 Python Console   ❶ Problems   🖥 Terminal   ◉ Services

PEP 8: W292 no newline at end of file

TASKS.py ×   Class.py ×

```python
class Vehicle:
    def __init__(self,make,mode,year):
        self.make=make
        self.mode=mode
        self.year=year
    def description(self):
        return f' {self.make} {self.mode} {self.year}'


class Car(Vehicle):
    def description(self):
        return f'Description of Car: {self.make} {self.mode} {self.year}'


class Motorcycle(Vehicle):
    def description(self):
        return f'Description of Motorcycle: {self.make} {self.mode} {self.year}'

A=Car("Ford","F001",2008)
B=Motorcycle("Yamaha","Y1001",2018)
print(A.description())
print(B.description())
```

Run: Class ×

```
C:\Users\anusr\PycharmProjects\pythonProject\venv\Scripts\python.exe C:\Users\anusr\Pycha
Description of Car: Ford F001 2008
Description of Motorcycle: Yamaha Y1001 2018


Process finished with exit code 0
```

Version Control   ▶ Run   Python Packages   TODO   Python Console   Problems   Terminal   Services

PEP 8: E305 expected 2 blank lines after class or function definition, found 1