

# Untitled

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### Q1. Explain Class and Object with respect to Object-Oriented Programming. Give a suitable example.

**0.0.1 Objects : classification of any real world entity**

**0.0.2 Class: it is a templet to create ojects**

```
[14]: class maths:  
      pass
```

```
[25]: class maths1:  
  
      def _init_(self,name,age):  
          self.name = name  
          self.age = age  
  
      def return_age(self):  
          return self.name,self.age
```

```
[ ]:
```

### Q2. Name the four pillars of OOPs.

**0.0.3 Abstraction, Encapsulation, Inheritance, and Polymorphism**

```
[ ]:
```

**0.0.4 Q3. Explain why the init() function is used. Give a suitable example.**

**0.0.5 init is a reserved method used to have multiple objects in a class and it let's the class to intialize the objects**

```
[ ]:
```

```
[27]: class english:

    def _init_(self,name,gmail_id,age):
        self.name = name
        self.gmail_id = gmail_id
        self.age = age

    def return_student_detail(self):
        return self.name,self.gmail_id,self.age
```

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0.0.6 Q4. Why self is used in OOPs?

0.0.7 self acts as reference and pointer which sends the data to the class

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0.0.8 Q5. What is inheritance? Give an example for each type of inheritance.

0.0.9 a mechanism where you can to derive a class from another class for a hierarchy of classes that share a set of attributes and methods.

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