```
#1

''' OPPS full form is object oriented progtamming and it's pragramming paradigm uses class
Classes are like BLUE PRINT of an object and OBJECTS are like real world entities.
In OOPS Data and Functions associated with that object are bind together as a single unit


#2

'''
In procedural programming, program is divided into small parts called functions.

In object oriented programming, program is divided into small parts called objects.

Procedural programming follows top down approach.

Object oriented programming follows bottom up approach.

There is no access specifier in procedural programming.

Object oriented programming have access specifiers like private, public, protected etc.

Adding new data and function is not easy.

Adding new data and function is easy.

Procedural programming does not have any proper way for hiding data so it is less secure.

Object oriented programming provides data hiding so it is more secure.

In procedural programming, overloading is not possible.

Overloading is possible in object oriented programming.

In procedural programming, function is more important than data.

In object oriented programming, data is more important than function.

Procedural programming is based on unreal world.

Object oriented programming is based on real world.

Examples: C, FORTRAN, Pascal, Basic etc.

Examples: C++, Java, Python, C# etc.'''


# 3

'''
1.OPPS in python supports all fundamental features of OOPS. Inheritance, Polymorphism, Enc

2.In inhertance we can inherate base class properties into child classes i.e. functions an
can be used in different classes. There are generally 3 types of inheritance, 1. Normal 2.
```

```
3.In polymorphism methods in all classes are same but the classes are indentified by there

4.In Encapsulation we can make any Class variable or Method variable or method private so
can\'t be access from outside the class and wont be able to change once created. But in py
can be accesesd using NAME MANGLING and its syntax is ObejctNAME_ClassNAME__variable/Funct

5.In Abstraction we can defined fixed set of variables and methods by importing abc librar
for other classes and doesnt use for implementation, only use for declaration
'''



# 4 Object is real world entity derived from Class


#5 Class is a blue print of an object and we make our object based methods and attributes


# 6
'''Class is important to create object and Object cant be created without defining class
Class is like a blue print and we make objects based on that Blue print i.e class
Lets say Mobile is a class and Iphone and Oneplus in an Object '''


     'Class is important to create object and Object cant be created without defining clas
     make objects based on that Blue print i.e class\nLets say Mobile is a class and Iphor


#7 No, inheritance feature we have to use to access base class methods in child class


#8 Inheritnace meaning we can inherate one class properties in other class


#9
# Simple in heritance: Base class properties can be used in child classes

# Multilevel Inheritance : we can create multiple classes, just we need to pass prevous cl
# last class will be child class and obejct will made of child class

# In multiple inheritance all classes except last class will be base classes and we need t
#parameter


#10 In multiple iher. methods of each classes can be used in others but in multiple classe
#Every class except last class in a base class in multiple inheritance but in multilevel o


#11
'''
Inherited functions work slower than normal function as there is indirection.

Improper use of inheritance may lead to wrong solutions.

Often, data members in the base class are left unused which may lead to memory wastage.
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```
Inheritance increases the coupling between base class and derived class.'''

#12
'''Super class is a base class and sub class is child class which derived from base class
we create object of child class always'''


#13

'''.super() is a function associated with OOPS programming and its use when we need to acc


#14

'''Encapulation is use to make methods and variables private to avoid modification and the
methods cant be accesed from  outside the class'''


#15

'''Name mangling is like a glitch in Python XD, we can access private variables and method
Syntax of name mangling is ObjectName_ClassName__Identifier'''


#16

'''Private modifiers are starts with double underscore and cant be accessed from outside
Public modifiers can be accessed and modify from outside the classes'''


#17

''' Python supports all the concept of "object oriented programming" but it is NOT fully o
the code in Python can also be written without creating classes.'''


#18

''' Abstraction is use to defined specific methods those are going to used in every classe
Abstraction  cant be used for implemenation only use for declaration'''


# 29
''' In Python, we can achieve abstraction using ABC (abstraction class) or abstract method
ABC is a class from the abc module in Python. ...
When we annotate any method with an abstractmethod keyword, then it is an abstract method


#20

''' Abstraction is use to defined specific methods those are going to used in every classe
Abstraction  cant be used for implemenation only use for declaration. We import abc module
and from that we use ABC and abstractmehod functions to create abstract class'''


#21
```

```
'''No, abstraction class is use just to declare methods cant be used for implementation'''

#22

'''Date abstraction is use just to declare blueprint for rest classes and abstract class o
Encapsulation is use to avoid unwanted data modification'''


#23
'''Polymorphism is classes having similar methods but we can identify them by their name''


#24

''' Methods in Python can be called with zero, one, or more parameters.

This process of calling the same method in different ways is called method overloading.

It is one of the important concepts in OOP.

Two methods cannot have the same name in Python;

hence method overloading is a feature that allows the same operator to have different mean


#25

''' Size of program created using OOP approach are often larger than size of program creat

Programs created using OOP can sometimes consume large amount of memory.

Code written using OOP are difficult to understand if you do not have good experience or p

Programmer needs to do heavy amount of planning to create a software using this approach.'
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