

# Topics Of the Day5

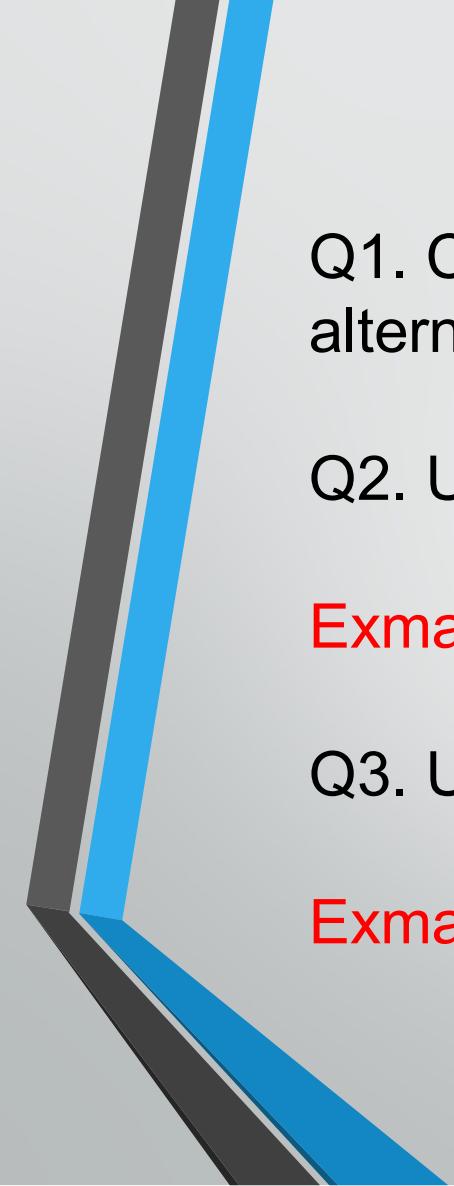
- WHAT IS A CLASS METHOD?
- Some Introspections Methods
- MAGIC DUNDER METHODS:
- OPERATOR OVERLOADING IN PYTHON
- WHAT IS FUNCTION CACHING?
- WHAT IS ASYNCIO
- How to Use Multithreading in Python
- WHAT IS MULTIPROCESSING?
- Modules (Time,Argparse,Shutil)

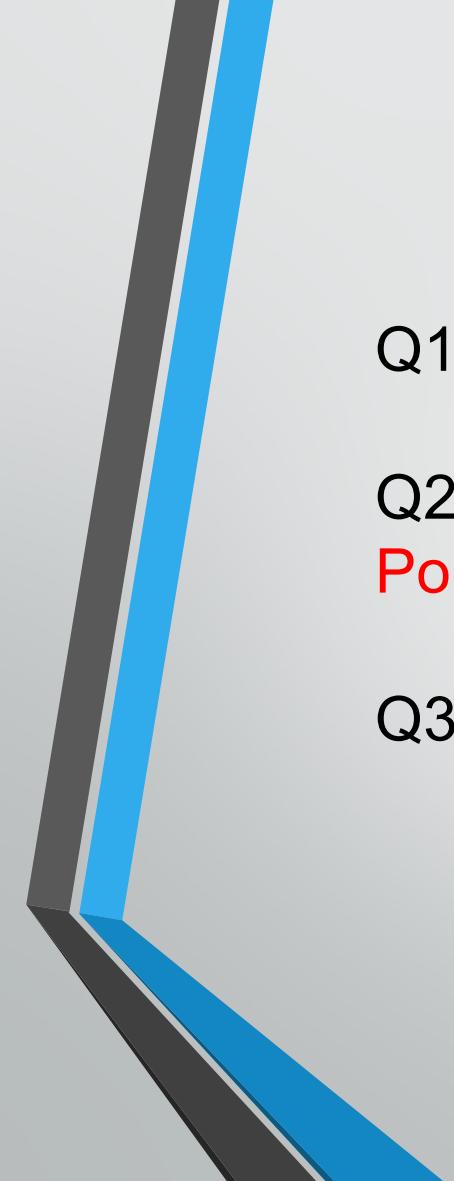
Q1. Create Animal → Dog and create given method then call dog's method.

Animal → info      Dog → bark

Q2. Access a private variable (**id**) using name-mangling

Q3. Create **instance variables** for name and age and show them for two objects

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- Q1. Create object from a string "name-age-id" using alternative constructor
  - Q2. Use super() to call parent constructor.
- Exmaple:** Base(name,age) → Derived(name,age,language)
- Q3. Use super() to access parent class method.
- Exmaple:** Base → showinfo() and Derived showinfo()

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- Q1. Create a class using `__str__()` method.
  - Q2. Overload `*` operator for multiplying object values.  
`Point(4,6) * Point(2,5) → Point(8,30)`
  - Q3. Add new method in child not in parent

Create class A and B, and class C inheriting from A and B.

A → B → C (three-level inheritance) and call methods of all and use super() to pass value

A → name

B → age

C → course

Create a hybrid structure: A → B, A → C, C → D.