Constructors

Constructors

- A special method that every class MUST have
- It's used when we create the objects of a class
- We can use constructors to initialize the object's instance variables.
- Execution of a constructor ALWAYS depends on the object

Creating Constructors

- Constructor is a special method that matches the name of the class and has no return type nor a specifier.

```
public class Car{

    public Car(){

    }

}
```

```
public class Employee{

    public Employee(int age){

    }

}
```

Cybertek

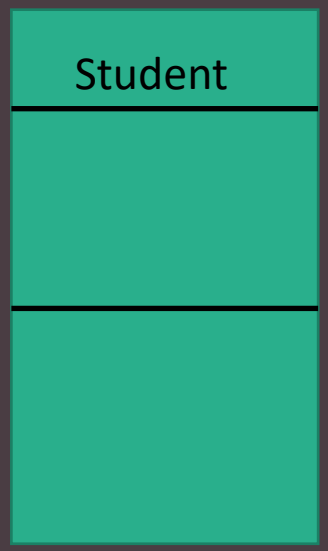
Types of Constructors

- No-argument Constructor: A constructor that has no parameter is known as default constructor. If we do not define a constructor in a class, then compiler creates default constructor(with no argument) for the class.

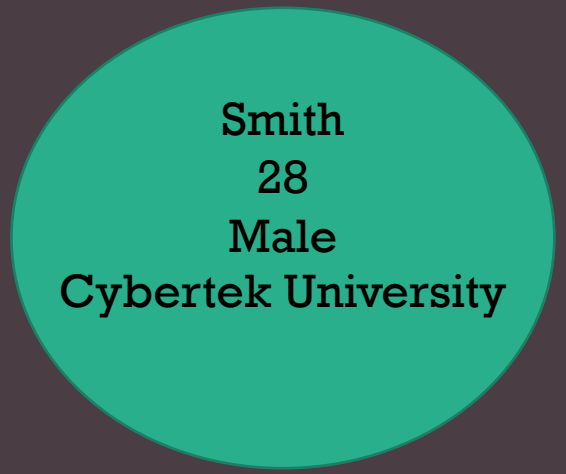
- Parameterized Constructor: A constructor that has parameters is known as parameterized constructor. If we want to initialize fields of the class with our own values, then we pass parameters to the constructor.

Task

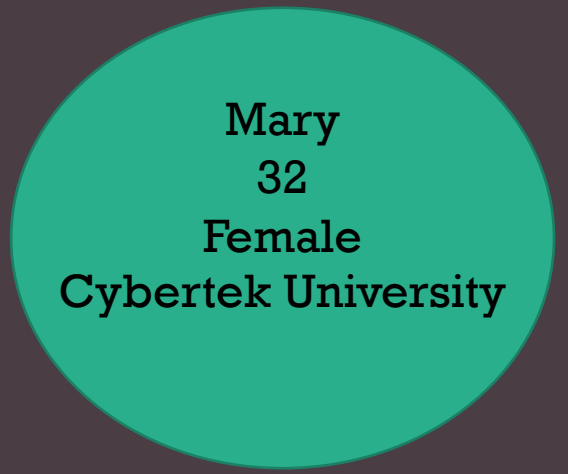
- For the following objects create Student class template.
- Write code for the Student class and another class to test it.
- This class has 4 properties: name,age,gender(M/F), and university



student1



student2



student3

Constructors Overloading

- we can have multiple constructors in a class by implementing method overloading

```
public class Dog{

    public Dog(){
        // no-arg constructor
    }

    public Dog(int age){
        // constructor with int argument
    }

    public Dog(String breed){
        // constructor with String argument
    }

}
```

Cybertek