

Exercise 3

- Modify the starting code (below):

- Jamie and Stacey will become each other's best friends (via a 'myBestie' attribute).
- After this is done display Stacey's name and the name of her bestie.
 - What will appear are the names entered by the user.

```
class Person:  
    def __init__(self):  
        self.name = "No name"  
  
def start():  
    stacey = Person()  
    jamie = Person()  
    jamie.name = input("name: ")  
    stacey.name = input("name: ")
```

James Tam

Solution

```
class Person:  
    def __init__(self):  
        self.name = "No name"  
        self.myBestie = None  
  
    def makeBesties(self,bestie):  
        self.myBestie = bestie  
        bestie.myBestie = self  
  
def start():  
    stacey = Person()  
    jamie = Person()  
    jamie.name = input("name: ")  
    stacey.name = input("name: ")  
  
    stacey.makeBesties(jamie)  
    print("%s, %s" %(stacey.name,stacey.myBestie.name))
```

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Errors

- The previous errors shown in other examples may be made in student solutions:
- The `self` reference:
 - Omitting it inside of the class methods.
 - Prefacing accessing to attributes and methods outside of the class methods.
- Local references (in this example they are in `start` but in a real program they could be local to any function or method):
 - Not declaring references before accessing attributes or methods.
 - Not prefacing access to attributes or methods with the name of the reference outside of the class methods.

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New Error: Wrong (New) Object Is The Bestie

```
class Person:  
    def __init__(self):  
        self.name = "No name"  
        self.myBestie = None  
  
    def makeBesties(self):  
        self.myBestie = Person()  
        self.myBestie.myBestie = self  
  
    def start():  
        stacey = Person()  
        jamie = Person()  
        jamie.name = input("name: ")  
        stacey.name = input("name: ")  
  
        stacey.makeBesties()  
        print("%s, %s" %(stacey.name,stacey.myBestie.name))
```

Jamie not the new object should have been the bestie

Stacey is besties with new object ("No name")

New object (not Jamie) lists Stacey as her bestie

James Tam

New Error: Wrong Object's Attribute Set

```
class Person:  
    def __init__(self):  
        self.name = "No name"  
        self.myBestie = None  
  
    def makeBesties(self):  
        self.myBestie = Person()  
        self.myBestie = self  
  
    def start():  
        stacey = Person()  
        jamie = Person()  
        jamie.name = input("name: ")  
        stacey.name = input("name: ")  
  
        stacey.makeBesties()  
        print("%s, %s" %(stacey.name,stacey.myBestie.name))
```

- Assigns to Stacey's 'myBestie' attribute not her best friend's 'myBestie' attribute.
- That is, Stacey is now her own best friend.

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