<u>Dates</u>

<u>Course</u>

<u>Progress</u>

<u>Help</u>

shengtatng ~

★ Course / Unit 5: Object Oriented Programming / 9. Classes and Inheritance

Discussion

()



<u>Calendar</u>

<u>Notes</u>

Finger Exercises due Oct 27, 2022 07:30 +08 Completed

Exercise: spell

9.0/9 points (graded)

ESTIMATED TIME TO COMPLETE: 12 minutes

Consider the following code:

```
class Spell(object):
    def __init__(self, incantation, name):
        self.name = name
        self.incantation = incantation
    def __str__(self):
        return self.name + ' ' + self.incantation + '\n' + self.getDescription()
    def getDescription(self):
        return 'No description'
    def execute(self):
        print(self.incantation)
class Accio(Spell):
    def __init__(self):
        Spell.__init__(self, 'Accio', 'Summoning Charm')
class Confundo(Spell):
    def __init__(self):
        Spell.__init__(self, 'Confundo', 'Confundus Charm')
    def getDescription(self):
        return 'Causes the victim to become confused and befuddled.'
def studySpell(spell):
    print(spell)
spell = Accio()
spell.execute()
studySpell(spell)
studySpell(Confundo())
```

1. What are the parent class(es)? Note that the term "parent class" is interchangable with the term "superclass".



2. What are the child class(es)? Note that the term "child class" is interchangable with the term "subclass".

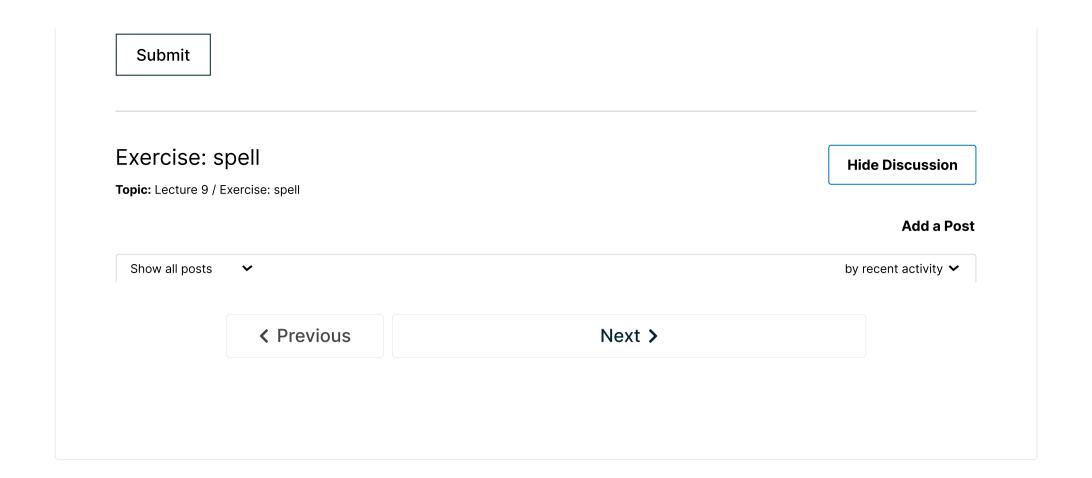
	Spell
✓	Accio
✓	Confundo

3. What does the code print out? Try figuring it out in your head before you try running it in Python.

Hint: This code prints out 5 lines. Enter each line that is printed out in its own box, in sequential order. 1. Accio 2. Summoning Charm Accio 3. No description 4. Confundus Charm Confundo 5. Causes the victim to become confused and befuddled. 4. Which [getDescription] method is called when [studySpell(Confundo())] is executed? The getDescription method defined within the Spell class The getDescription method defined within the Accio class The getDescription method defined within the Confundo class 5. How do we need to modify Accio so that print(Accio()) will print the following description? Summoning Charm Accio This charm summons an object to the caster, potentially over a significant distance. 1 class Accio(Spell): 2 def __init__(self): 3 Spell.__init__(self, 'Accio', 'Summoning Charm') 4 5 def getDescription(self): 6 return 'This charm summons an object to the caster, potentially over a significant distance.' 7 Press ESC then TAB or click outside of the code editor to exit Correct

Test results

See full output **CORRECT** See fu? Hide Notes



© All Rights Reserved



edX

About

Affiliates

edX for Business

Open edX

<u>Careers</u>

<u>News</u>

Legal

Terms of Service & Honor Code

Privacy Policy

Accessibility Policy

Trademark Policy

<u>Sitemap</u>

Connect

Blog

Contact Us

Help Center

Media Kit













