







< polymorphismMystery6

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<u>polymorphismMysteryHamburger ></u>

You are working on problem set: Project 5 (Pause)



② polymorphismMystery10 [▽]

Language/Type: C++ <u>inheritance</u> <u>polymorphism</u>

Consider the following classes; assume that each is defined in its own file.

```
class Jesse : public Tulip {
public:
    virtual void m1() {
        cout << "Js1 ":
        Cassidy::m1();
    }
    virtual void m4() {
        cout << "Js4 ";
        m2();
    }
};
class Cassidy {
public:
    virtual void m1() {
        cout << "Ca1 ";
        m2();
    }
    virtual void m2() {
        cout << "Ca2 ";
    }
}:
class Tulip : public Cassidy {
public:
    virtual void m2() {
        cout << "Tu2 ":
```

```
Cassidy::m2();
    }
    virtual void m3() {
        cout << "Tu3 ":
        m1();
    }
};
```

Now assume that the following variables are defined:

```
Cassidy*
          var1 = new Tulip();
Tulip*
          var2 = new Jesse();
```

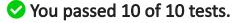
In the table below, indicate in the right-hand column the output produced by the statement in the left-hand column. If the statement produces more than one line of output, indicate the line breaks with slashes as in "x / y / z" to indicate three lines of output with "x" followed by "y" followed by "z". If the statement does not compile, write "COMPILER ERROR". If a statement would crash at runtime or cause unpredictable behavior, write "CRASH".

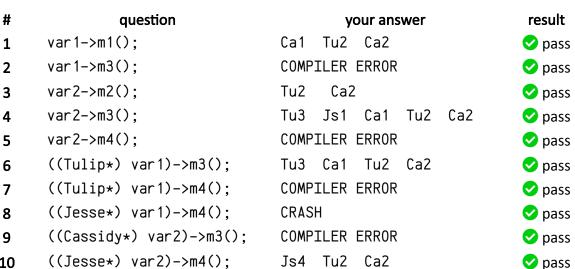
```
var1->m1();
                              Ca1
                                   Tu2 Ca2
var1->m3();
                               COMPILER ERROR
var2->m2();
                                    Ca2
                               Tu2
var2->m3();
                               Tu3 Js1 Ca1 Tu2 Ca2
var2->m4();
                               COMPILER ERROR
((Tulip*) var1)->m3();
                               Tu3 Ca1 Tu2 Ca2
((Tulip*) var1)->m4();
                              COMPILER ERROR
((Jesse*) var1)->m4():
                              CRASH
((Cassidy*) var2)->m3();
                              COMPILER ERROR
((Jesse*) var2)->m4();
                               Js4 Tu2
                                       Ca2
```





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Need help?



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