Types (V)

Polymorphism (cont.)

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"""
Conversion.py
"""

class Human:

    def setID (self, id):
        self.id = id

    # abstract method
    def isHappy (self):
        pass

    def printt (self):
        print(self.id, ", ", self.isHappy())

class Parent (Human):

    def __init__ (self, id):
         Human.setID(self, id)

    def isHappy (self):
        return False

    # python doesn't support overloading
    def isHappy (self, age):
        if age < 25:
            return True
        else:
            return False

    # isHappy invoked in printt is the most recent one
    # so the interpreter complains it doesn't have param
    def printt (self):
        print("ID %d is %s" % (self.id, self.isHappy()))


class Child (Human):

    def __init__ (self, id):
        Human.setID(self, id)

    def isHappy (self):
        return True

def main ():
    p = Parent(100)
    c = Child(101)

    p.printt()
    c.printt()

if __name__ == "__main__":
    main()
```