Your Piggy Bank: A Simple Python Class

In this worksheet, you will learn how to create a simple piggy bank using Python! We will make a piggy bank that can hold money, add money to it, and let you take money out. Let’s get started!

# Step 1: Create a Simple Piggy Bank Class

In this step, you will create a Piggy Bank using Python. You will define the money in the piggy bank and be able to add or take away money.

## Starter Template:

class PiggyBank:  
 # Step 1: This is where we put how much money is in your piggy bank when it starts  
 def \_\_init\_\_(self, starting\_money):  
 self.money = starting\_money # The money in your piggy bank  
  
 # Step 2: Method to add money to the piggy bank  
 def add\_money(self, amount):  
 self.money += amount # Add money to your piggy bank  
  
 # Step 3: Method to take money out of the piggy bank  
 def take\_money(self, amount):  
 if self.money < amount: # Check if there's enough money  
 return "Not enough money!" # If not enough, say you can't take it  
 else:  
 self.money -= amount # Take the money out  
 return f"You now have {self.money} in your piggy bank."  
  
# Step 4: Create a piggy bank with 10 pounds to start  
my\_piggy\_bank = PiggyBank(10)  
  
# Step 5: Add 5 pounds to the piggy bank  
my\_piggy\_bank.add\_money(5)  
  
# Step 6: Try to take out 12 pounds (what happens?)  
print(my\_piggy\_bank.take\_money(12)) # This should tell you "Not enough money!"  
  
# Step 7: Take out 7 pounds (what happens?)  
print(my\_piggy\_bank.take\_money(7)) # This will show how much money is left

# Questions to Think About:

1. What happens when you try to take out more money than you have in your piggy bank?  
2. How can you make sure you don’t run out of money in your piggy bank?  
3. Can you think of other things you could add to your PiggyBank class? For example, adding a name to the piggy bank?

# Next Steps:

1. Create your own Piggy Bank with 10 pounds inside.   
2. Add 5 pounds to the piggy bank.   
3. Try to take out 12 pounds (what happens?).   
4. Take out 7 pounds and see how much money is left.