import random  
### 作业1  
class DataStructure:  
 def \_\_init\_\_(self, data\_type, value\_range):  
 self.data\_type = data\_type  
 self.value\_range = value\_range  
  
 def generate\_random\_data(self):  
 if self.data\_type == 'int':  
 return random.randint(\*self.value\_range)  
 elif self.data\_type == 'float':  
 return random.uniform(\*self.value\_range)  
 elif self.data\_type == 'str':  
 return ''.join(random.choices(self.value\_range, k=10))  
 else:  
 return None  
  
# 示例用法  
ds = DataStructure('int', (1, 100))  
print(ds.generate\_random\_data())