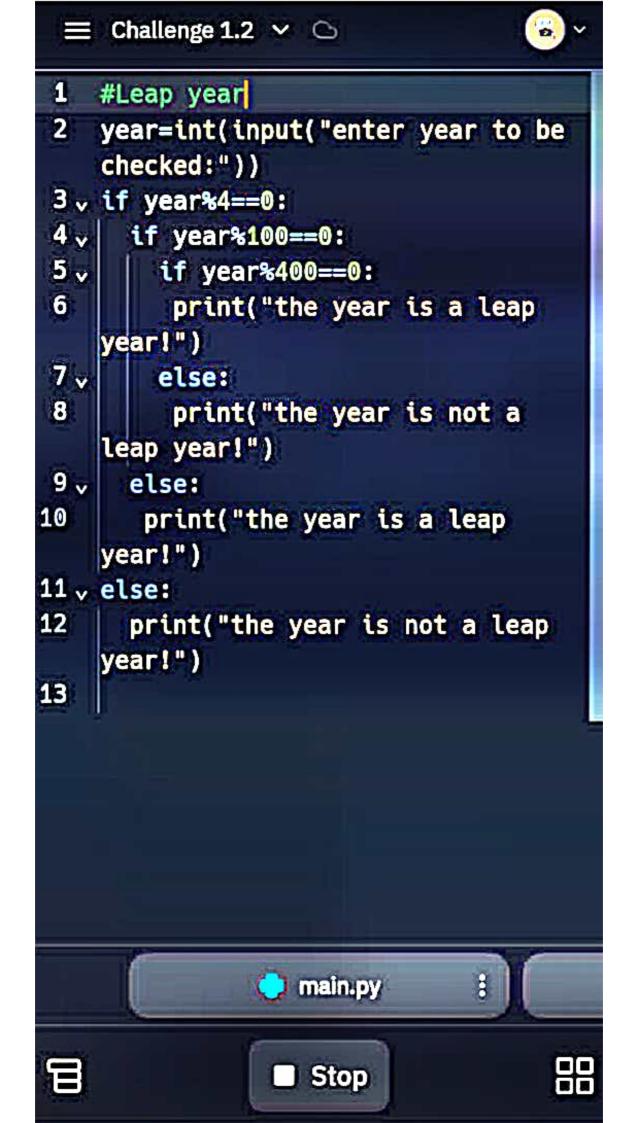
```
    □ Challenge 1.1 ∨ ⊗
 1 def fact_rec(n):
      if n==0 or n==1:
 2 ,
 3
         return 1
     elser
 4 .
 5
        return n*fact_rec(n-1)
 6
 7
    number=2
    res = fact_rec(number)
 8
 9
10
    print("The factorial of{} is
    {}".format(number, res,))
11
                         Ln 1, Col 1 History 19
                                1
               main.py
                 Run
```



```
    ■ Challenge 2.1 ∨ ⊗
 1 class BankAccount:
2
       def __init__(self,
3 ,
    account_number,
    account_holder_name,
    initial_balance=0):
 4
5
            self.__account_number =
    account_number
6
 7
    self.__account_holder_name =
    account_holder_name
8
9
            self.__account_balance =
    initial_balance
10
11
12
13 .
        def deposit(self, amount):
14
15 .
             if amount > 0:
16
17
             count halance 1- amount
               nain.py
                 ▶ Run
```

```
    □ Challenge 3.1 ∨ ⊗

                                    10
 1 v def
    linear_search_product(products,
    target_product):
         indices = []
 2
3 <sub>v</sub>
        for index, product in
    enumerate(products):
4 .
           if product==target_product:
5
                 indices.append(index)
6
         return indices
7
8
    #Example usage:
9
10
    # Sample list of products
11
    product_list =
    ["apple", "banana", "orange",
    "apple", "grape", "apple"]
12
13
    # Target product to search for
14
    target_product = "apple"
15
16
   # Call the function
17
   result =
    linear_search_product(product_lis
                          Ln 1, Col 1 History 19
                                B
                main.py
                 Run
```

```
    ■ Challenge 3.2 ∨ ⊗
 1 v def sort_students(student_list):
 2
        sorted_students =
    sorted(student_list, key=lambda
    student: student.cgpa,
    reverse=True)
        return sorted_students
 3
 4
 5 v class Student:
        def __init__(self, name,
 6 🗸
    roll_number, cgpa):
 7
            self.name = name
 8
             self.roll_number =
    roll_number
 9
             self.cgpa = cgpa
10
11
   # Test with different input
    lists of students
12 v students_list = [
13
    Student("John","2021001",3.9),
14
    Student("Jane","2021002",3.7),
15
      Student("Alice","2021003",3.8),
                         Ln 1, Col 1 History '9
                main.py
                                1
                 ▶ Run
```



