



```
1 ✓ def fact_rec (n):  
2   | if n==0 or n==1:  
3   |     return 1  
4 ✓ | else:  
5   |     return n*fact_rec (n-1)  
6 number =2  
7 res=fact_rec (number)  
8 print("the factorial of {}  
   is {}".format(number,res))
```

Ln 1, Col 1 History ↻



main.py



Run





```
1 ✓ def isleapyear(year):  
2 ✓     if(year%4==0 and  
   year%100!=0)or year%400==0:  
3       return True  
4 ✓     else:  
5       return False  
6 year=int(input("enter a  
   year"))  
7 ✓ if isleapyear(year):  
8     print("{} is leap  
   year".format(year))  
9 ✓ else:  
10    print("{}is not a leap  
    year".format(year))
```



```
1 ✓ class player:
2     def play(self):
3         print("The player is playing
  cricket")
4
5 ✓ class Batsman(player):
6     def play(self):
7         print("The batsman is playing
  batting")
8
9 ✓ class Blower(player):
10    def play(self):
11        print("The blower is playing
  bowling")
12
13 batsman = Batsman()
14 blower = Blower()
15
16 batsman.play()
17 blower.play()
```

Ln 1, Col 1 History ↻



main.py



➤ python3 main.py

The batsman is playing batting

The blower is playing bowling

➤



>\_ Console



```

1 ✓ class BankAccount:
2 ✓     def __init__(self,account_number,
    account_holder_name,
    inital_balance=0.0):
3         self.__account_number =
    account_number
4         self.__account_holder_name =
    account_holder_name
5         self.__account_balance =
    inital_balance
6
7 ✓     def deposit(self, amount):
8 ✓         if amount > 0:
9             self.__account_balance +=
    amount
10             print("Deposit ₹{}. New
    balance: {}".format(amount,
        self.__account_balance))
11
12 ✓         else:
13             print("Invalid deposit
    amount")
14

```

Ln 1, Col 1 • Spaces: 2 History ⌵

🐍 main.py



▶ Run






```

15  def withdraw(self, amount):
16      if amount > 0 and amount <=
self.__account_balance:
17          self.__account_balance -=
amount
18          print("Withdraw ₹{}. New
balance: {}".format(amount,
self.__account_balance))
19
20  else:
21      print("Invalid withdraw
amount")
22
23  def display_balance(self):
24      print("Account balance for {}
(Account #{}): ₹{}".format(
25          self.__account_holder_name,
self.__account_number,
26          self.__account_balance))
27  account =
BankAccount(account_number="4455769"
,account_holder_name="Kutdraleshwara
n N",

```

Ln 1, Col 1 • Spaces: 2 History 



main.py



 Run



```

24         print("Account balance for {}
      (Account #{}): ₹{}".format(
25             self.__account_holder_name,
      self.__account_number,
26             self.__account_balance))
27 account =
      BankAccount(account_number="4455769"
      ,account_holder_name="Kutdraleshwara
      n N",
28     inital_balance=5000.0)
29
30 account.display_balance()
31 account.deposit(500)
32 account.withdraw(300)
33 account.display_balance()

```

Ln 1, Col 1 • Spaces: 2 History 



main.py



 Run



▾ Run

245ms on 17:44:04, 10/18 ✓

```
Account balance for Kutdraleshwaran N (  
Account #4455769): ₹5000.0  
Deposit ₹500. New balance: 5500.0  
Withdraw ₹300. New balance: 5200.0  
Account balance for Kutdraleshwaran N (  
Account #4455769): ₹5200.0
```



>\_ Console



▶ Run





```

1 ✓ class Student:
2
3 ✓     def
        __init__(self,name,roll_number,c
        gpa):
4         self.name=name
5         self.roll_number=roll_number
6         self.cgpa=cgpa
7
8 ✓ def sort_students(student_list):
9
10
        sort_students=sorted(student_lis
        t, key=lambda student:
        student.cgpa,reverse=True)
11
12         return sort_students
13
14 ✓ students =[
15     Student("mani","A123",7.8),
16     Student("ram","A124",9.8),
17     Student("vik","A628",8.8),
18

```

 main.py

 Run




```
13
14 ✓ students =[
15     Student("mani","A123",7.8),
16     Student("ram","A124",9.8),
17     Student("vik","A628",8.8),
18     Student("raj","A383",8.2)
19 ]
20
21 sorted_students=sort_students(st
  u dents)
22
23 ✓ for student in sorted_students:
24     print("Name: {},Roll Number:
      {},CGPA: {}".
      format(student.name,student.roll
        _number,student.cgpa))
25
26
27
28
29
```



main.py



Run



```
➤ python3 main.py
```

```
Name: ram, Roll Number: A124, CGPA: 9.8
```

```
Name: vik, Roll Number: A628, CGPA: 8.8
```

```
Name: raj, Roll Number: A383, CGPA: 8.2
```

```
Name: mani, Roll Number: A123, CGPA: 7.8
```

```
➤
```

⋮

>\_ Console

⋮



▶ Run



```
1  def
    linearSearchProduct(productList,
targetProduct):
2      indices = []
3
4  for index, product in
    enumerate(productList):
5      if product == targetProduct:
6          indices.append(index)
7
8      return indices
9
10 products = ["shoes", "boot",
    "loafer", "shoes", "sandal",
    "shoes"]
11 target = "shoes"
12 target2 = 'apple'
13 result =
    linearSearchProduct(products,
target)
14 result2 =
    linearSearchProduct(products,
target)
15 print(result)
16
```

Ln 15, Col 14 History



main.py



Run





```
python3 main.py  
[0, 3, 5]  

```



&gt;\_ Console



Run

