

PROJECT SUBMISSION

Write a Python program to create a list of software application details

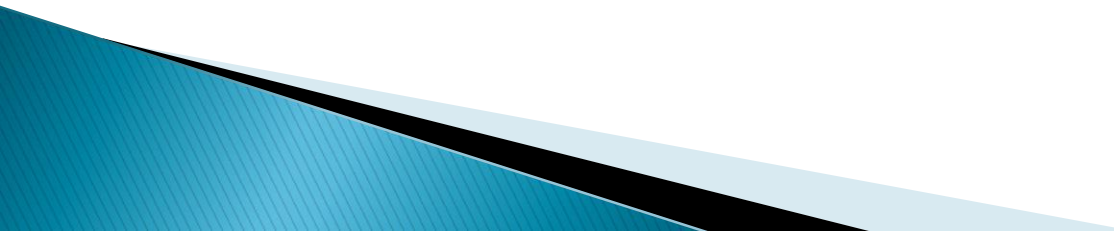
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PROBLEM STATEMENT

Write a Python program to create a list of software application details.

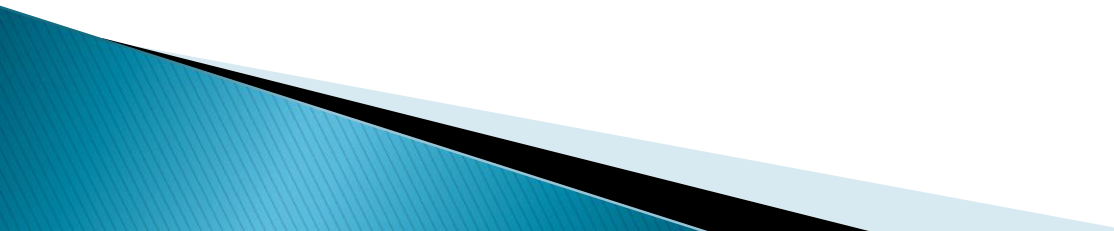
The details of application include name, author, version, publishing year , price

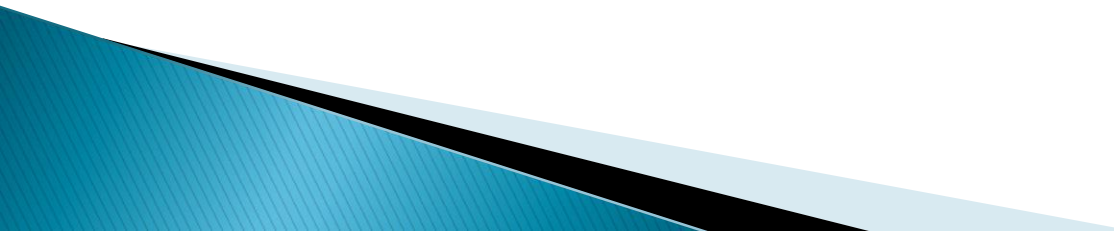
- ▶ Perform the following with respect to the list of application created.
 - ▶ a) Display all the details of application by a given author.
 - ▶ b) Sort the details of application in the increasing order of price.
 - ▶ c) Display the details of applications published by a given publisher in a given year.
 - ▶ d) Sort the list of applications in the increasing order of two fields , author and publishing year of the books.
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SOFTWARE REQUIRED

- ▶ PYTHON PROGRAMMING LANGUAGE

ALGORITHM

- ▶ Step 1: Start.
 - ▶ Step 2: Get the predefined inputs for application.
 - ▶ Step 3: The author name Will be get as user input and the regarding application details were displayed in the choice 1.
 - ▶ Step 4: In choice 2 the application details were displayed under the given year.
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- ▶ Step 5: In choice 3 sorting the cost price of the applications were printed in ascending order of price.
 - ▶ Step 6: In choice 4 all the application details were printed as per the predefined inputs.
 - ▶ Step 7: In choice 5 the author and the year of application were get as user input and the regarding application details were displayed.
 - ▶ Step 8: Stop
- 

Program Explanation

```
1 applicationname=['C','java','python']
2 author=['gowtham','kishore','ram']
3 version=[1,2,3]
4 year=[2015,2010,2000]
5 cost=[ 2340, 456, 789]
6 j=1
7 while(1):
8     choice=int(input("Enter your choice\t:\t"))
```

The application details were get as pre defined input. The details are Application Name, Author, Version, Year of Publication and Cost of Application.


```
9- if(choice==1):
10     find_author=input("Enter author\t:\t")
11     n=len(author)
12     exist=0
13     for i in range(0,n):
14         if(find_author==author[i]):
15             print('application name\t:\t',applicationname[i])
16             print('Author name\t:\t',author[i])
17             print('version\t\t:\t',version[i])
18             print('year\t\t\t:\t',year[i])
19             print('cost\t\t\t:\t',cost[i])
20             exist=1
21     if(not exist):
22         print('the author name does not exist in the list')
```

**There are 6 Choice of case, In Choice 1
The application details were displayed
by given a Author Name as a input in
choice 1**


```
23 if(choice==2):
24     find_year=int(input("Enter Year\t:\t"))
25     n=len(year)
26     exist=0
27     for i in range(0,n):
28         if(find_year==year[i]):
29             print('application name\t:\t',applicationname[i])
30             print('Author name\t:\t',author[i])
31             print('version\t\t:\t',version[i])
32             print('year\t\t\t:\t',year[i])
33             print('cost\t\t\t:\t',cost[i])
34             exist=1
35     if(not exist):
36         print('the year does not exist in the list')
```

In Choice 2 The application details were displayed by given a Year as a input in choice 2

```
37 ~ if(choice==3):
38     test_list=[['gowtham','C',1,2015,2340],['kishore','java',2,2010,
39     test_list.sort(key=lambda test_list:test_list[4])
40     print(" "+str(test_list))
41 ~ if(choice==4):
42     for i in range(0,n):
43         print('application name\t:\t',applicationname[i])
44         print('Author name\t:\t',author[i])
45         print('version\t\t\t\t',version[i])
46         print('year\t\t\t\t',year[i])
47         print('cost\t\t\t\t',cost[i])
48 ~ if(choice==5):
49     find_year=int(input("Enter Year\t:\t"))
```



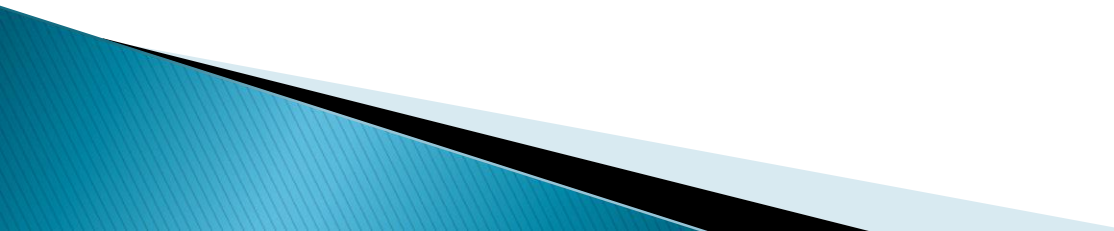
In Choice 3 the cost of applications were sorted and displayed the application details in sorted order and in Choice 4 the full details of application were displayed.

```
48 if(choice==5):
49     find_year=int(input("Enter Year\t:\t"))
50     find_author=input("Enter author name\t:\t")
51     n=len(year)
52     exist=0
53     for i in range(0,n):
54         if((find_year==year[i])and(find_author==author[i])):
55             print('application name\t:\t',applicationname[i])
56             print('Author name\t:\t',author[i])
57             print('version\t\t\t:\t',version[i])
58             print('year\t\t\t:\t',year[i])
59             print('cost\t\t\t:\t',cost[i])
60             exist=1
61 if(not exist):
```

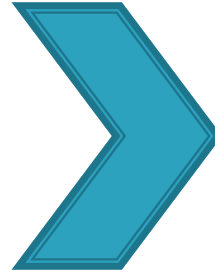
In Choice 5 the Author Name and year of application were get as input and the application details were displayed.

Sample Input & Output

These are the Pre defined inputs in this program

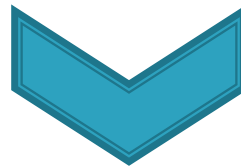
- applicationname=['C','java','python']
 - author=['gowtham', 'kishore', 'ram']
 - version=[1,2,3]
 - year=[2015,2010,2000]
 - cost=[2340, 456, 789]
- 

```
Enter your choice : 1
Enter author : kishore
Application name : java
Author name : kishore
Version : 2
Year : 2010
Cost : 456
Enter your choice : 2
Enter Year : 2015
Application name : C
Author name : gowtham
Version : 1
Year : 2015
Cost : 2340
Enter your choice :
```



Output of application details by given the input as Author Name in Choice 1 and Year in Choice 2

```
Enter your choice : 3
[['kishore', 'java', 2, 2010, 456], ['ram', 'python', 3, 2000, 789], ['gowt', 2015, 2340]]
Enter your choice : 
```



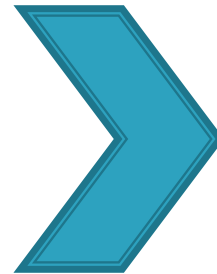
The Applications are in Sorted by Cost in Choice 3

```
Author name      :      growtham
version          :      1
year             :      2015
cost             :      2340
application name :      java
Author name      :      kishore
version          :      2
year             :      2010
cost             :      456
application name :      python
Author name      :      ram
version          :      3
year             :      2000
cost             :      789
Enter your choice :
```



Full Details of Applications

```
year             :      2000
cost             :      789
Enter your choice :      5
Enter Year       :      2015
Enter author name :      growtham
application name  :      C
Author name      :      growtham
version          :      1
year             :      2015
cost             :      2340
Enter your choice :      6
```



Output of application details by given the input as Author Name and Year in Choice 5.

```
...Program finished with exit code 0
Press ENTER to exit console.█
```

THANK YOU