

```
from google.colab import drive
drive.mount('/content/drive')
```

Drive already mounted at /content/drive; to attempt to forcibly remount, call drive.mount("/content/drive", force\_remount=True)

```
!pip install pyswip
```

Looking in indexes: <https://pypi.org/simple>, <https://us-python.pkg.dev/colab-wheels/public/simple/>  
Requirement already satisfied: pyswip in /usr/local/lib/python3.8/dist-packages (0.2.10)

```
# importing libraries
import nltk
nltk.download('punkt')
from nltk.tokenize import word_tokenize
from nltk.stem import PorterStemmer
from pyswip import Prolog
```

```
[nltk_data] Downloading package punkt to /root/nltk_data...
[nltk_data]   Package punkt is already up-to-date!
```

```
print("Welcome to shopping mart")
print("Enter your name")
name = input()
print("Hello " + name + "! We are happy to serve you here at our shopping mart.")
print("What will state your occupation as:[student/employee/business]")
occ = input()
print("What category are you searching your products in: ")
print("We have these categories in our mart (electronics,furniture,household items)")
typ = input()

print("Would you like to use our auto set budgets or not")
choice = input()

choi = 0
lower = 0
upper = 0
```

```
☞ Welcome to shopping mart
Enter your name
Jatin
Hello Jatin! We are happy to serve you here at our shopping mart.
What will state your occupation as:[student/employee/business]
I am a studying
What category are you searching your products in:
We have these categories in our mart (electronics,furniture,household items)
I want to buy some furniture
Would you like to use our auto set budgets or not
no bitch
```

```
ps = PorterStemmer()

tok1 = word_tokenize(choice)
choilist = []
for wod in tok1:
    stem1 = ps.stem(wod)
    choilist.append(stem1)

for ele in choilist:
    if("y" in ele):
        choi =2
        choice = "yes"
        break
    else:
        choice = "no"
        choi = 1

tok2 = word_tokenize(typ)
typlist = []
for wod in tok2:
    stem1 = ps.stem(wod)
    typlist.append(stem1)
```

```

for ele in typlist:
    if("elec" in ele):
        typ = "electronics"
        break
    elif ("furn" in ele):
        typ = "furniture"
        break
    else:
        typ = "household"

tok3 = word_tokenize(occ)
occlist = []
for wod in tok3:
    stem1 = ps.stem(wod)
    occlist.append(stem1)

for ele in occlist:
    if("stud" in ele):
        occ = "student"
        break
    elif ("emp" in ele):
        occ = "employee"
        break
    else:
        occ = "business"

if(occ == "student"):
    occu = 1
elif(occ == "employee"):
    occu = 2
else:
    occu = 3

```

```

import json

f = open('/content/drive/MyDrive/AI/Ass5/sort_data.json')
data = json.load(f)

print("Since you have chosen " + typ + ", here are the categories for the items(choose the number and type the number only)")
#get categories

if typ == "electronics":
    typind = 0
    typ = "electronics"
elif typ == "furniture":
    typind = 1
    typ = "furniture"
else:
    typind = 2
    typ = "household_items"

i = 0
for item in data[typind]['items']:
    print(str(i) + " " + item['category'])
    i = i+1

cat = int(input())
category = data[typind]['items'][cat]['category']
category = category.lower()
cate = ""
for i in category:
    if i == " ":
        cate = cate + " "
    elif i == "&":
        cate += "and"
    else:
        cate += i

```

```

#get subcategories
print("Since you have chosen " + category + ", here are the subcategories for the items")
i = 0
for item in data[typind]['items'][cat]['items']:
    print(str(i) + " " + item['subCategory'])
    i = i+1

print("Choose the sub category from the chosen category (choose the number and type the number only)")
subcat = int(input())

subCategory = data[typind]['items'][cat]['items'][subcat]['subCategory']

subCategory = subCategory.lower()
sucate = ""
for i in subCategory:
    if i == " ":
        sucate = sucate + "_"
    elif i == "&":
        sucate += "and"
    else:
        sucate += i

print("You have chosen the " + subCategory + " of " + category + " category")

rating = 0
highest_rated = {}
for item in data[typind]['items'][cat]['items'][subcat]['items']:
    if(item['Rating'] >= rating):
        highest_rated = item

print("The highest rated product in the category is: \n" + highest_rated['Name'] + " with the rating of " + str(highest_rated[

if(choi == 1):
    print("You have chosen not to use the auto set budget so choose your budget limits.")
    print("Your budget lower limit (Give only the number)")
    lower = input()
    print("Your budget upper limit (Give only the number)")
    upper = input()
else:
    print("we are using the auto set budget for you")

```

```

Since you have chosen furniture, here are the categories for the items(choose the number and type the number only)
0 Bedroom
1 Living Room
2 Study/Office
3 Kitchen
4 Dining Room
5 Bathroom
5
Since you have chosen bathroom, here are the subcategories for the items
0 Showers
1 Bathroom storage
2 Taps
Choose the sub category from the chosen category (choose the number and type the number only)
1
You have chosen the bathroom storage of bathroom category
The highest rated product in the category is:
Crompton 15 L Storage Water Geyser (Solarium Care 15 L ... with the rating of 3.02 and a price of ₹10,594
You have chosen not to use the auto set budget so choose your budget limits.
Your budget lower limit (Give only the number)
0
Your budget upper limit (Give only the number)
50

```

```

ans = '' + (typ + "(" + cate + ", " + sucate + ", " + str(occu) + ", " + str(choi) + ", " + str(lower) + ", " + str(upper) + ").

```

```

import subprocess
x = 'echo ' + ans + ' | swipl -q -f /content/drive/MyDrive/AI/Ass5/shopping.pl'
print(subprocess.getoutput(x))

```

```

Warning: /content/drive/MyDrive/AI/Ass5/shopping.pl:259:
Singleton variables: [_bottles]

```

```
Warning: /content/drive/MyDrive/AI/Ass5/shopping.pl:263:
  Clauses of items/2 are not together in the source-file
    Earlier definition at /content/drive/MyDrive/AI/Ass5/shopping.pl:3
    Current predicate: items/3
    Use :- disjoint items/2. to suppress this message
Warning: /content/drive/MyDrive/AI/Ass5/shopping.pl:269:
  Singleton variables: [_bottles]
Warning: /content/drive/MyDrive/AI/Ass5/shopping.pl:362:
  Singleton variables: [Electronics,Furniture,Household]
Warning: /content/drive/MyDrive/AI/Ass5/shopping.pl:363:
  Singleton variables: [Lname]
Warning: /content/drive/MyDrive/AI/Ass5/shopping.pl:379:
  Singleton variables: [Item_type_Main]
Warning: /content/drive/MyDrive/AI/Ass5/shopping.pl:550:
  Singleton variables: [Item_type_Main]
Warning: /content/drive/MyDrive/AI/Ass5/shopping.pl:720:
  Singleton variables: [Item_type_Main]
Warning: /content/drive/MyDrive/AI/Ass5/shopping.pl:907:
  Singleton variables: [Own_brand]
Warning: /content/drive/MyDrive/AI/Ass5/shopping.pl:916:
  Singleton variables: [X]
Warning: /content/drive/MyDrive/AI/Ass5/shopping.pl:963:
  Singleton variables: [L,U]
Warning: /content/drive/MyDrive/AI/Ass5/shopping.pl:964:
  Singleton variables: [F]
Warning: /content/drive/MyDrive/AI/Ass5/shopping.pl:1021:
  Singleton variables: [L]
```

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Welcome to Furniture section

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Here is the top rated product according to your needs:

Brand : Plantex

Name and description : Plantex Premium Black Glass Corner Shelf for Bathroom/K...

Price(in rupees) : 1049

Rating(Out of 5) : 4.87

Total Ratings : 1267

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Here are some stats to help aid your searching experience- :

Average Product Price: 1170.3103448275863

The price range available here is:

The lowest price is: 151

The highest price is: 10594

The total numbers of reviewers that rated this product subtype: 26560

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Since you are a Student ,your auto-budget is set too:

0 - 1170.3103448275863

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