

Sample Run with student and employee, using budget changes and brand recommendations in the electronics section.

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Welcome to SWI-Prolog (threaded, 64 bits, version 8.4.3)
SWI-Prolog comes with ABSOLUTELY NO WARRANTY. This is free software.
Please run ?- license, for legal details.

For online help and background, visit https://www.swi-prolog.org
For built-in help, use ?- help(Topic), or ?- apropos(Word).

Warning: /Users/tejdeep/Desktop/AI/AI-assgn/shopping.pl:259:
Warning:   Singleton variables: [bottles]
Warning: /Users/tejdeep/Desktop/AI/AI-assgn/shopping.pl:263:
Warning:   Clauses of items/2 are not together in the source-file
Warning:   Earlier definition at /Users/tejdeep/Desktop/AI/AI-assgn/shopping.pl:3
Warning:   Current predicate: items/3
Warning:   Use :- discontiguous items/2.. to suppress this message
Warning: /Users/tejdeep/Desktop/AI/AI-assgn/shopping.pl:269:
Warning:   Singleton variables: [bottles]
Warning: /Users/tejdeep/Desktop/AI/AI-assgn/shopping.pl:362:
Warning:   Singleton variables: [Electronics,Furniture,Household]
Warning: /Users/tejdeep/Desktop/AI/AI-assgn/shopping.pl:363:
Warning:   Singleton variables: [lname]
Warning: /Users/tejdeep/Desktop/AI/AI-assgn/shopping.pl:896:
Warning:   Singleton variables: [lname]
Warning: /Users/tejdeep/Desktop/AI/AI-assgn/shopping.pl:905:
Warning:   Singleton variables: [X]
Warning: /Users/tejdeep/Desktop/AI/AI-assgn/shopping.pl:952:
Warning:   Singleton variables: [L,U]
Warning: /Users/tejdeep/Desktop/AI/AI-assgn/shopping.pl:953:
Warning:   Singleton variables: [F]
Warning: /Users/tejdeep/Desktop/AI/AI-assgn/shopping.pl:1010:
Warning:   Singleton variables: [L]
* /Users/tejdeep/Desktop/AI/AI-assgn/shopping.pl compiled 0.03 sec, 212 clauses
?- i.

=====
Welcome to shopping mart
=====

Enter your First name :|: Tejdeep.

Enter your Last name :|: Chippa.

Choose what category do you most relate to:
Choose the category from the provided options which you want to buy from
[electronics, furniture, household_items]
|: electronics.

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Welcome to Electronics section
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What category do you most relate with? (Type index)
1. Student
2. Employee
3. Business
|: 1.
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What category do you most relate with? (Type index)
1. Student
2. Employee
3. Business
|: 1.

Select the product which you want to buy from the given list:
audio
cameras
computer_peripherals
gaming
health_and_personal_care
laptop_accessories
tablets_desktop
smart_home_automation
smart_wearables
storage
tablets
mobiles
|: cameras.

Select the type of product you would like to buy:
dslr_and_mirrorless
sports_and_action
point_and_shoot
instant_cameras
action_cams
camera_tripods
camera_lenses
drone
flashes
gimbals
|: dslr_and_mirrorless.

Here is the top rated product according to your needs:
Brand: SONY
Name and description : SONY Alpha ILCE-7RM4 Mirrorless Camera Body Only
Price(in rupees) : 248890
Rating(Out of 5) : 4.88
Total Ratings : 1600

=====
Here are some stats to help aid your searching experience :-:
Average Product Price: 103201.21739130435
The price range available here is :
    The lowest price is: 284
    The highest price is: 296890
The total numbers of reviewers that rated this product subtype: 26947
=====
Since you are a Student ,your auto-budget is set too:
0 - 103201.21739130435
Do you wish to change this?(Choose Index)
1.Yes
2.No
|: 2.

Do you wish to change this?(Choose Index)
1.Yes
2.No
|: 2.

These are the recommendations based on your budget (Top Rated First):
Brand : Canon
Name and description : Canon EOS 1500D DSLR Camera Body+ 18-55 mm IS II Lens
Price(in rupees) : 36390
Rating(Out of 5) : 4.72
Total Ratings : 1946

Brand : POZUB
Name and description : POZUB High Quality Portable Multi-Purpose Selfie Stick Stand With Dustproof Bag PZB-XT012 Travel Tripo...
Price(in rupees) : 286
Rating(Out of 5) : 4.66
Total Ratings : 1029

Brand : NIKON
Name and description : NIKON Z 50 Mirrorless Camera Body with 16-50mm & 50-250mm Lenses
Price(in rupees) : 92890
Rating(Out of 5) : 4.43
Total Ratings : 1339

Brand : FUJIFILM
Name and description : FUJIFILM X Series X-E4 Mirrorless Camera Body with XF 27 mm F2.8 R WR Prime Lens
Price(in rupees) : 89890
Rating(Out of 5) : 4.41
Total Ratings : 1557

Brand : POZUB
Name and description : POZUB 3 in1 Multi-Purpose Bluetooth Extendable Wireless Remote Selfie Stick Tripod Stand + Dustproof B...
Price(in rupees) : 205
Rating(Out of 5) : 4.3
Total Ratings : 1144

Brand : Canon
Name and description : Canon EOS 200D II DSLR Camera EF-S18-55mm IS STM
Price(in rupees) : 53390
Rating(Out of 5) : 4.15
Total Ratings : 1848

Brand : SONY
Name and description : SONY Alpha ILCE-6400M Mirrorless Camera with 18-135mm Zoom Lens
Price(in rupees) : 102890
Rating(Out of 5) : 4.14
Total Ratings : 499

Brand : NIKON
Name and description : NIKON Z 50 Mirrorless Camera Body with 16-50mm Lens
Price(in rupees) : 75390
Rating(Out of 5) : 4.02
Total Ratings : 627

Brand : Canon
Name and description : Canon EOS 3000D DSLR Camera 1 Camera Body, 18 - 55 mm Lens
Price(in rupees) : 26890
Rating(Out of 5) : 3.98
Total Ratings : 982

Brand : Canon
Name and description : Canon EOS M50 Mark II Vlogger Kit Mirrorless Camera EF-M 15-45mm Lens
Price(in rupees) : 47490
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Brand : Canon
Name and description : Canon EOS M50 Mark II Vlogger Kit Mirrorless Camera EF-M 15-45mm Lens
Price(in rupees) : 67899
Rating(Out of 5) : 3.59
Total Ratings : 876

Brand : SONY
Name and description : SONY Alpha Full Frame ILCE-7M2K/BQ INS Mirrorless Camera Body with 28 - 70 mm Lens
Price(in rupees) : 76899
Rating(Out of 5) : 3.55
Total Ratings : 1549

Brand : SONY
Name and description : SONY ILCE-6100L/B INS Mirrorless Camera With 16-50 mm Power Zoom Lens
Price(in rupees) : 66890
Rating(Out of 5) : 3.51
Total Ratings : 883

Brand : POZUB
Name and description : POZUB New Arrival 3in1 Selfie Stick Stand With Dustproof Bag PZB-XT012 Travel Tripod Stand Flexible Ma...
Price(in rupees) : 284
Rating(Out of 5) : 3.17
Total Ratings : 1629

Would you like to get recommendations based on brands?(ChooseIndex)
1.Yes
2.No

|: 1.
Pick a brand from the brands available(Please write the name within double inverted commas):
SONY
Canon
POZUB
NIKON
FUJIFILM

|: "SONY".
Brand : SONY
Name and description : SONY Alpha ILCE-7RM4 Mirrorless Camera Body Only
Price(in rupees) : 248890
Rating(Out of 5) : 4.88
Total Ratings : 1560
Brand : SONY
Name and description : SONY ILCE-7C/SQ INS Mirrorless Camera Mirrorless
Price(in rupees) : 137690
Rating(Out of 5) : 4.34
Total Ratings : 1552
Brand : SONY
Name and description : SONY ILCE-6400M Mirrorless Camera with 18-135mm Zoom Lens
Price(in rupees) : 122890
Rating(Out of 5) : 4.14
Total Ratings : 499
Brand : SONY
Name and description : SONY ILCE-7SM3/BQ INS Mirrorless Camera Mirrorless
Price(in rupees) : 296890
Rating(Out of 5) : 3.62
Total Ratings : 1797
Brand : SONY
Name and description : SONY Alpha Full Frame ILCE-7M2K/BQ INS Mirrorless Camera Body with 28 - 70 mm Lens
Price(in rupees) : 76899
Rating(Out of 5) : 3.55
Total Ratings : 1549
Brand : SONY
Name and description : SONY ILCE-7CL/SO INS Mirrorless Camera Mirrorless
Name and description : SONY ILCE-7CL/SQ INS Mirrorless Camera Mirrorless
Price(in rupees) : 163190
Rating(Out of 5) : 3.51
Total Ratings : 1755
Brand : SONY
Name and description : SONY ILCE-6100L/B INS Mirrorless Camera With 16-50 mm Power Zoom Lens
Price(in rupees) : 66890
Rating(Out of 5) : 3.51
Total Ratings : 883
Brand : SONY
Name and description : SONY ILCE-7M4/BQ INS Mirrorless Camera Body Only
Price(in rupees) : 211790
Rating(Out of 5) : 3.45
Total Ratings : 865
Brand : SONY
Name and description : SONY ILCE-7C/BQ INS Mirrorless Camera Mirrorless
Price(in rupees) : 137690
Rating(Out of 5) : 3.13
Total Ratings : 883
Would you like to search for more products?(1,0)
|: 1.
=====
Welcome to Electronics section
=====

What category do you most relate with? (Type index)
1. Student
2. Employee
3. Business
|: 2.

Select the product which you want to buy from the given list:
audio
cameras
computer_peripherals
gaming
health_and_personal_care
laptop_accessories
laptop_and_desktop
smart_tv_automation
smart_wearables
storage
tablets
mobiles
|: audio.

Select the type of product you would like to buy:
bluetooth_headphones
wired_headphones
true_wireless_earbuds
bluetooth_speakers
soundbars
home_theatres
|: soundbars.

Here is the top rated product according to your needs!
Brand : SAREGAMA
Name and description : SAREGAMA Carvaan Musicbar CB120 with Signature Sound an...

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Here is the top rated product according to your needs:
Brand : SAREGAMA
Name and description : SAREGAMA Carvaan Musicbar CB120 with Signature Sound an...
Price(in rupees) : 5890
Rating(Out of 5) : 4.82
Total Ratings : 368

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Here are some stats to help aid your searching experience- :
Average Product Price: 6150.3448275862065
The price range available here is:
    The lowest price is: 318
    The highest price is: 24890
The total numbers of reviewers that rated this product subtype: 33329
=====
Since you are a Employee ,your auto-budget is set too: 6150.3448275862065 - 24890
Do you wish to change this?(Choose Index)
1.Yes
2.No
: 1.

Please provide your budget(lower limit):
: 15000.
Please provide your budget(Upper limit):
: 25000.

These are the recommendations based on your budget (Top Rated First):

Brand : ZEBRONICS
Name and description : ZEBRONICS ZEB-JUKE BAR 9800 DWS Pro Dolby Atmos With Wi...
Price(in rupees) : 15899
Rating(Out of 5) : 3.96
Total Ratings : 125

Brand : SONY
Name and description : SONY HT-S40R 600 W Bluetooth Soundbar
Price(in rupees) : 24890
Rating(Out of 5) : 3.86
Total Ratings : 1998

Brand : SONY
Name and description : SONY HT-S20R Dolby Digital 400 W Bluetooth Soundbar
Price(in rupees) : 15899
Rating(Out of 5) : 3.59
Total Ratings : 1081

Brand : boAt
Name and description : boAt Avante Bar 2000 160 W Bluetooth Soundbar
Price(in rupees) : 7899
Rating(Out of 5) : 4.56
Total Ratings : 1670

Brand : boAt
Name and description : boAt Avante Bar 4000DA With Dolby Atmos 3D 200 W Bluet...
Price(in rupees) : 13899
Rating(Out of 5) : 4.53
Total Ratings : 1399

Brand : boAt
Name and description : boAt Avante Bar 4000DA With Dolby Atmos 3D 200 W Bluet...
Price(in rupees) : 13899
Rating(Out of 5) : 4.53
Total Ratings : 1399

Brand : boAt
Name and description : boAt Avante Bar 1750 with Wireless Subwoofer & Master ...
Price(in rupees) : 6899
Rating(Out of 5) : 4.08
Total Ratings : 1770

Brand : ZEBRONICS
Name and description : ZEBRONICS ZEB-JUKE BAR 9800 DWS Pro Dolby Atmos With Wi...
Price(in rupees) : 15899
Rating(Out of 5) : 3.96
Total Ratings : 125

Brand : SONY
Name and description : SONY HT-S40R 600 W Bluetooth Soundbar
Price(in rupees) : 24890
Rating(Out of 5) : 3.86
Total Ratings : 1998

Brand : Panasonic
Name and description : Panasonic SC-HTB78GW-K 160 W Bluetooth Soundbar
Price(in rupees) : 6899
Rating(Out of 5) : 3.64
Total Ratings : 208

Brand : SONY
Name and description : SONY HT-S20R Dolby Digital 400 W Bluetooth Soundbar
Price(in rupees) : 15899
Rating(Out of 5) : 3.59
Total Ratings : 1081

Brand : ZEBRONICS
Name and description : ZEBRONICS ZEB-Juke Bar 9400 Pro Dolby 525 W Bluetooth S...
Price(in rupees) : 10899
Rating(Out of 5) : 3.51
Total Ratings : 601

Brand : boAt
Name and description : boAt Avante Bar 3100D 260 W Bluetooth Soundbar
Price(in rupees) : 12899
Rating(Out of 5) : 3.34
Total Ratings : 1585

Brand : SAMSUNG
Name and description : SAMSUNG HW-T42E/XL Dolby Digital 150 W Bluetooth Soundb...
Price(in rupees) : 6399
Rating(Out of 5) : 3.29
Total Ratings : 1979

Brand : MOTOROLA
Name and description : MOTOROLA AmphisoundX with HDMI Arc 80 W Bluetooth Home ...
Price(in rupees) : 6399
Rating(Out of 5) : 3.17
Total Ratings : 1850

Would you like to get recommendations based on brands?(ChooseIndex)
1.Yes
2.No
: 1.


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Price(in rupees) : 6899
Rating(Out of 5) : 4.08
Total Ratings : 1770

Brand : ZEBRONICS
Name and description : ZEBRONICS ZEB-JUKE BAR 9800 DWS Pro Dolby Atmos With Wi...
Price(in rupees) : 15899
Rating(Out of 5) : 3.96
Total Ratings : 125

Brand : SONY
Name and description : SONY HT-S40R 600 W Bluetooth Soundbar
Price(in rupees) : 24899
Rating(Out of 5) : 3.86
Total Ratings : 1998

Brand : Panasonic
Name and description : Panasonic SC-HTB78GW-K 160 W Bluetooth Soundbar
Price(in rupees) : 6899
Rating(Out of 5) : 3.64
Total Ratings : 208

Brand : SONY
Name and description : SONY HT-S20R Dolby Digital 400 W Bluetooth Soundbar
Price(in rupees) : 15899
Rating(Out of 5) : 3.59
Total Ratings : 1081

Brand : ZEBRONICS
Name and description : ZEBRONICS ZEB-Juke Bar 9400 Pro Dolby 525 W Bluetooth S...
Price(in rupees) : 10899
Rating(Out of 5) : 3.51
Total Ratings : 601

Brand : boAt
Name and description : boAt Aavante Bar 31000 260 W Bluetooth Soundbar
Price(in rupees) : 12899
Rating(Out of 5) : 3.34
Total Ratings : 1585

Brand : SAMSUNG
Name and description : SAMSUNG HW-T42E/XL Dolby Digital 150 W Bluetooth Soundb...
Price(in rupees) : 6399
Rating(Out of 5) : 3.29
Total Ratings : 1979

Brand : MOTOROLA
Name and description : MOTOROLA AmphisoundX with HDMI Arc 80 W Bluetooth Home ...
Price(in rupees) : 6399
Rating(Out of 5) : 3.17
Total Ratings : 1856

Would you like to get recommendations based on brands?(ChooseIndex)
1.Yes
2.No

[: 2
Would you like to search for more products?(1,8)
[:] 0.

THANKYOU FOR USING JCT RECOMMENDATION SYSTEM
true .
? - 1.

```

Sample Runs with Business Man in the Furniture section with budget changes and brand recommendations.

```

?- i.
=====
Welcome to shopping mart
=====
Enter your First name: 
|: Jatin.
Enter your Last name: 
|: Tyagi.
Choose what category do you most relate to:
Choose the category from the provided options which you want to buy from
[electronics, furniture, household_items]
|: furniture.
=====
Welcome to Furniture section
=====
What category do you most relate with? (Type index)
1. Student
2. Employee
3. Business
|: 3.

Select the room for which you want to buy from the given list:
bedroom
living_room
study/office
kitchen
dining_room
bathroom
|: living_room.

Select the type of product you would like to buy:
sofa
coffee_table
tv_stand
cabinets
curtains
|: sofa.

Here is the top rated product according to your needs:
Brand : Bharat
Name and description : Bharat Lifestyle Alina Fabric 3 + 2 Sofa Set
Price(in rupees) : 21599
Rating(Out of 5) : 4.9
Total Ratings : 856
=====
Here are some stats to help aid your searching experience:- :


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

Average Product Price: 14858.206896551725
The price range available here is:
    The lowest price is: 6999
    The highest price is: 38331
The total numbers of reviewers that rated this product subtype: 33326
=====
Since you are a Business ,your auto-budget is set too:
0 - 38331
Do you wish to change this?(Choose Index)
1.Yes
2.No
|: 1.

Please provide your budget(lower limit):
|: 10000.
Please provide your budget(Upper limit):
|: 20000.

These are the recommendations based on your budget (Top Rated First):
Brand : Seventh
Name and description : Seventh Heaven Milan 3 Seater Sofa, Chenille Molfino Fa...
Price(in rupees) : 11560
Rating(Out of 5) : 4.66
Total Ratings : 1827
Brand : Trevi
Name and description : Trevi Bliss Fabric 5 Seater Sofa
Price(in rupees) : 17990
Rating(Out of 5) : 4.63
Total Ratings : 1832
Brand : Flipkart
Name and description : Flipkart Perfect Homes Crete Leatherette and Fabric 3 +...
Price(in rupees) : 17999
Rating(Out of 5) : 4.52
Total Ratings : 298
Brand : Bharat
Name and description : Bharat Lifestyle Fabric 3 + 1 + 1 Sofa Set
Price(in rupees) : 17999
Rating(Out of 5) : 4.46
Total Ratings : 1045
Brand : WESTIDO
Name and description : WESTIDO Cyrus Leatherette 3 + 1 + 1 Sofa Set
Price(in rupees) : 18899
Rating(Out of 5) : 4.35
Total Ratings : 288
Brand : Taskwood
Name and description : Taskwood Furniture Sheesham Solid Wood 3 Seater Sofa Fo...
Price(in rupees) : 11899
Rating(Out of 5) : 4.26
Total Ratings : 1461
Brand : Vandanam

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Brand : Kendalwood
Name and description : Kendalwood Furniture Solid Wood 3 Seater Wooden Sofa Set
Price(in rupees) : 12749
Rating(Out of 5) : 4.23
Total Ratings : 861

Brand : Taskwood
Name and description : Taskwood Furniture Solid Wooden Fabric Three Seater Sofa Set
Price(in rupees) : 11899
Rating(Out of 5) : 4.08
Total Ratings : 1073

Brand : Seventh
Name and description : Seventh Heaven Milan, Chenille Molfino Fabric; 3 Year Warranty
Price(in rupees) : 11560
Rating(Out of 5) : 3.93
Total Ratings : 452

Brand : Seventh
Name and description : Seventh Heaven Milan 3 Seater Sofa, Chenille Molfino Fabric
Price(in rupees) : 11560
Rating(Out of 5) : 3.93
Total Ratings : 1220

Brand : saamenia
Name and description : saamenia furnitures Solid Wood Sheesham Wood 3 Seater Sofa Set
Price(in rupees) : 13499
Rating(Out of 5) : 3.9
Total Ratings : 931

Brand : Flipkart
Name and description : Flipkart Perfect Homes Leatherette 3 + 1 + 1 Sofa Set
Price(in rupees) : 17999
Rating(Out of 5) : 3.77
Total Ratings : 510

Brand : Seventh
Name and description : Seventh Heaven Fabric 3 Seater Sofa
Price(in rupees) : 11560
Rating(Out of 5) : 3.38
Total Ratings : 1999

Brand : Seventh
Name and description : Seventh Heaven Milan, Chenille Molfino Fabric; 3 Year Warranty
Price(in rupees) : 11560
Rating(Out of 5) : 3.19
Total Ratings : 1745

Brand : Sleepyhead
Name and description : Sleepyhead Kiki Fabric 2 Seater Sofa
Price(in rupees) : 10798
Rating(Out of 5) : 3.31
Total Ratings : 1899

Brand : WESTIDO
Name and description : WESTIDO Leatherette 3 Seater Sofa
Price(in rupees) : 10399
Rating(Out of 5) : 3.69
Total Ratings : 922

Brand : Bharat
Name and description : Bharat Lifestyle Alina Fabric 3 + 2 Sofa Set
Price(in rupees) : 21599
Rating(Out of 5) : 4.0
Total Ratings : 131

Brand : Bharat
Name and description : Bharat Lifestyle Aston shape Leatherette 6 Seater Sofa
Price(in rupees) : 28799
Rating(Out of 5) : 4.83
Total Ratings : 131

Brand : Flipkart
Name and description : Flipkart Perfect Homes Martina Leatherette and Fabric 8+2 sofa set
Price(in rupees) : 27539
Rating(Out of 5) : 4.82
Total Ratings : 1102

Brand : Trevi
Name and description : Trevi Bliss Fabric 5 Seater Sofa
Price(in rupees) : 17990
Rating(Out of 5) : 4.63
Total Ratings : 1832

Brand : Flipkart
Name and description : Flipkart Perfect Homes Crete Leatherette and Fabric 3+1+1 sofa set
Price(in rupees) : 17999
Rating(Out of 5) : 4.52
Total Ratings : 290

Brand : Bharat
Name and description : Bharat Lifestyle Fabric 3 + 1 + 1 Sofa Set
Price(in rupees) : 17999
Rating(Out of 5) : 4.46
Total Ratings : 1045

Brand : WESTIDO
Name and description : WESTIDO Cyrus Leatherette 3 + 1 + 1 Sofa Set
Price(in rupees) : 18899
Rating(Out of 5) : 4.35
Total Ratings : 288

Brand : Flipkart
Name and description : Flipkart Perfect Homes Alora Fabric 6 Seater Sofa
Price(in rupees) : 30399
Rating(Out of 5) : 4.21
Total Ratings : 1731

Brand : ORMEE
Name and description : ORMEE Fabric 6 Seater Sofa
Price(in rupees) : 38331
Rating(Out of 5) : 3.89
Total Ratings : 1449

Brand : Flipkart
Name and description : Flipkart Perfect Homes Leatherette 3 + 1 + 1 Sofa Set
Price(in rupees) : 17999
Rating(Out of 5) : 3.77
Total Ratings : 510

Would you like to get recommendations based on brands?(ChooseIndex)
1.Yes
2.No

[1]
Pick a brand from the brands available(Please write the name within double inverted commas):
Bharat
Flipkart
Seventh
Trevi

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```
|: User Ratings : 200
Brand : Flipkart
Name and description : Flipkart Perfect Homes Alora Fabric 6 Seater Sofa
Price(in rupees) : 30399
Rating(Out of 5) : 4.21
Total Ratings : 1731
Brand : ORMEE
Name and description : ORMEE Fabric 6 Seater Sofa
Price(in rupees) : 38331
Rating(Out of 5) : 3.89
Total Ratings : 1449
Brand : Flipkart
Name and description : Flipkart Perfect Homes Leatherette 3 + 1 + 1 Sofa Set
Price(in rupees) : 17999
Rating(Out of 5) : 3.77
Total Ratings : 510
Would you like to get recommendations based on brands?(ChooseIndex)
1:Yes
2:No
|: 1.
Pick a brand from the brands available(Please write the name within double inverted commas):
Bharat
Flipkart
Saamena
Trevi
WESTINDIA
Taskwood
Kendalwood
saamenia
ORMEE
Limaaz
Sleepyhead
|: "Flipkart".
Brand : Flipkart
Name and description : Flipkart Perfect Homes Martina Leatherette and Fabric 8...
Price(in rupees) : 27539
Rating(Out of 5) : 4.82
Total Ratings : 1102
Brand : Flipkart
Name and description : Flipkart Perfect Homes Crete Leatherette and Fabric 3 +...
Price(in rupees) : 17999
Rating(Out of 5) : 4.52
Total Ratings : 298
Brand : Flipkart
Name and description : Flipkart Perfect Homes Alora Fabric 6 Seater Sofa
Price(in rupees) : 30399
Rating(Out of 5) : 4.21
Total Ratings : 1731
Brand : Flipkart
Name and description : Flipkart Perfect Homes Leatherette 3 + 1 + 1 Sofa Set
Price(in rupees) : 17999
Rating(Out of 5) : 3.77
Total Ratings : 510
Would you like to search for more products?(1,0)
|: 0.
THANKYOU FOR USING JCT RECOMMENDATION SYSTEM
true .
```

Sample run with Employee in with budget changes and no brand recommendations in Household section.

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?- i.
=====
Welcome to shopping mart
=====
Enter your First name:
|: Jaideep.
Enter your Last name :
|: Guntupalli.
Choose what category do you most relate to:
Choose the category from the provided options which you want to buy from
[electronics, furniture, household_items]
|: household_items.
=====
Welcome to Household Items section
=====
What category do you most relate with? (Type index)
1. Student
2. Employee
3. Business
|: 2.

Select the product which you want to buy from the given list:
furnishings
Kitchen_and_dining
home_decor
toiletries
lighting_and_electricals
cleaning_and_bath
pet_gardening
|: home_decor.

Select the type of product you would like to buy:
lighting
wallpapers
paintings_and_posters
clocks
decoratives
vases
home_fragrances
photo_frames
|: wallpapers.

Here is the top rated product according to your needs:
Brand : KAAF
Name and description : KAAF Abstract White Wallpaper
Price(in rupees) : 127
Rating(Out of 5) : 4.89
Total Ratings : 1635
```

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=====
Here are some stats to help aid your searching experience- :
Average Product Price: 128.24137931034483
The price range available here is:
    The lowest price is: 79
    The highest price is: 239
The total numbers of reviewers that rated this product subtype: 30420
=====
Since you are a Employee ,your auto-budget is set too:
128.24137931034483 - 239
Do you wish to change this?(Choose Index)
1.Yes
2.No
|: 1.

Please provide your budget(lower limit):
|: 100
Please provide your budget(Upper limit):
|: 200.

These are the recommendations based on your budget (Top Rated First):
Brand : KAAF
Name and description : KAAF Abstract White Wallpaper
Price(in rupees) : 127
Rating(Out of 5) : 4.89
Total Ratings : 1635

Brand : KAAF
Name and description : KAAF Decorative Multicolor Wallpaper
Price(in rupees) : 127
Rating(Out of 5) : 4.72
Total Ratings : 472

Brand : KAAF
Name and description : KAAF Abstract Multicolor Wallpaper
Price(in rupees) : 127
Rating(Out of 5) : 4.67
Total Ratings : 158

Brand : Flipkart
Name and description : Flipkart SmartBuy Wall Stickers Wallpaper Happy Winter ...
Price(in rupees) : 135
Rating(Out of 5) : 4.58
Total Ratings : 330

Brand : Wollzo
Name and description : Wollzo Decorative Multicolor Wallpaper
Price(in rupees) : 135
Rating(Out of 5) : 4.56
Total Ratings : 1306

Brand : Oren
Name and description : Oren Empower Floral & Botanical Beige, Brown Wallpaper
Price(in rupees) : 140
Rating(Out of 5) : 4.44
Total Ratings : 1500
```

Brand : Wolzo
Name and description : Wolzo Decorative Multicolor Wallpaper
Price(in rupees) : 135
Rating(Out of 5) : 4.31
Total Ratings : 1865

Brand : KAAF
Name and description : KAAF Abstract Black Wallpaper
Price(in rupees) : 127
Rating(Out of 5) : 4.81
Total Ratings : 1279

Brand : KAAF
Name and description : KAAF Floral & Botanical White, Pink Wallpaper
Price(in rupees) : 127
Rating(Out of 5) : 3.92
Total Ratings : 689

Brand : Flipkart
Name and description : Flipkart SmartBuy Wall Stickers Wallpaper Brown Natural...
Price(in rupees) : 135
Rating(Out of 5) : 3.87
Total Ratings : 830

Brand : doodad
Name and description : doodad Classics Black Wallpaper
Price(in rupees) : 138
Rating(Out of 5) : 3.83
Total Ratings : 1074

Brand : Wolzo
Name and description : Wolzo Floral & Botanical Beige Wallpaper
Price(in rupees) : 135
Rating(Out of 5) : 3.78
Total Ratings : 1013

Brand : Wolzo
Name and description : Wolzo Decorative Multicolor Wallpaper
Price(in rupees) : 135
Rating(Out of 5) : 3.39
Total Ratings : 1335

Brand : KAAF
Name and description : KAAF Abstract Beige Wallpaper
Price(in rupees) : 127
Rating(Out of 5) : 3.21
Total Ratings : 1679

Brand : Whsq
Name and description : Whsq Decorative Green Wallpaper
Price(in rupees) : 143
Rating(Out of 5) : 3.18
Total Ratings : 1496

Brand : Wollberry
Name and description : Wollberry Decorative Multicolor Wallpaper
Price(in rupees) : 135
Rating(Out of 5) : 3.05
Total Ratings : 456

Brand : Flipkart
Name and description : Flipkart SmartBuy Wall Stickers Wallpaper Happy Winter ...
Price(in rupees) : 135

Brand : Flipkart
Name and description : Flipkart SmartBuy Wall Stickers Wallpaper Happy Winter ...
Price(in rupees) : 135
Rating(Out of 5) : 4.58
Total Ratings : 330

Brand : Wolzo
Name and description : Wolzo Decorative Multicolor Wallpaper
Price(in rupees) : 135
Rating(Out of 5) : 4.56
Total Ratings : 1306

Brand : Oren
Name and description : Oren Empower Floral & Botanical Beige, Brown Wallpaper
Price(in rupees) : 140
Rating(Out of 5) : 4.44
Total Ratings : 1580

Brand : Wolzo
Name and description : Wolzo Decorative Multicolor Wallpaper
Price(in rupees) : 135
Rating(Out of 5) : 4.31
Total Ratings : 1865

Brand : Rawpockets
Name and description : Rawpockets Decorative Multicolor Wallpaper
Price(in rupees) : 239
Rating(Out of 5) : 4.3
Total Ratings : 1662

Brand : Whsq
Name and description : Whsq Nature Multicolor Wallpaper
Price(in rupees) : 215
Rating(Out of 5) : 4.14
Total Ratings : 1866

Brand : Flipkart
Name and description : Flipkart SmartBuy Wall Stickers Wallpaper Brown Natural...
Price(in rupees) : 135
Rating(Out of 5) : 3.87
Total Ratings : 830

Brand : doodad
Name and description : doodad Classics Black Wallpaper
Price(in rupees) : 138
Rating(Out of 5) : 3.83
Total Ratings : 1074

Brand : Wolzo
Name and description : Wolzo Floral & Botanical Beige Wallpaper
Price(in rupees) : 135
Rating(Out of 5) : 3.78
Total Ratings : 1013

Brand : KAAF
Name and description : KAAF Floral & Botanical Multicolor Wallpaper
Price(in rupees) : 223
Rating(Out of 5) : 3.5
Total Ratings : 655

Brand : Wolzo
Name and description : Wolzo Decorative Multicolor Wallpaper
Price(in rupees) : 135
Rating(Out of 5) : 3.39

```

Brand : Whisq
Name and description : Whisq Nature Multicolor Wallpaper
Price(in rupees) : 135
Rating(Out of 5) : 4.14
Total Ratings : 1866

Brand : Flipkart
Name and description : Flipkart SmartBuy Wall Stickers Wallpaper Brown Natural...
Price(in rupees) : 135
Rating(Out of 5) : 3.87
Total Ratings : 830

Brand : doodad
Name and description : doodad Classics Black Wallpaper
Price(in rupees) : 138
Rating(Out of 5) : 3.83
Total Ratings : 1074

Brand : Wollzo
Name and description : Wollzo Floral & Botanical Beige Wallpaper
Price(in rupees) : 135
Rating(Out of 5) : 3.78
Total Ratings : 1013

Brand : KAAF
Name and description : KAAF Floral & Botanical Multicolor Wallpaper
Price(in rupees) : 223
Rating(Out of 5) : 3.5
Total Ratings : 655

Brand : Wollzo
Name and description : Wollzo Decorative Multicolor Wallpaper
Price(in rupees) : 135
Rating(Out of 5) : 3.39
Total Ratings : 1335

Brand : HOMEMATES
Name and description : HOMEMATES Floral & Botanical Multicolor Wallpaper
Price(in rupees) : 203
Rating(Out of 5) : 3.32
Total Ratings : 669

Brand : Whisq
Name and description : Whisq Decorative Green Wallpaper
Price(in rupees) : 143
Rating(Out of 5) : 3.18
Total Ratings : 1496

Brand : Wollberry
Name and description : Wollberry Decorative Multicolor Wallpaper
Price(in rupees) : 135
Rating(Out of 5) : 3.05
Total Ratings : 456

Would you like to get recommendations based on brands?(ChooseIndex)
1.Yes
2.No

|: 2.
Would you like to search for more products?(1,0)
|: 0.

THANKYOU FOR USING JCT RECOMMENDATION SYSTEM
true .

```

Sample runs with Business in the employee section with no budget changes and brand recommendations.

```
=====
Welcome to shopping mart
=====
Enter your First name:
|: Cyrus.
Enter your Last name :
|: Monteiro.
Choose what category do you most relate to:
Choose the category from the provided options which you want to buy from
[electronics, furniture, household_items]
|: electronics.

=====
Welcome to Electronics section
=====

What category do you most relate with? (Type index)
1. Student
2. Employee
3. Business
|: 3.

Select the product which you want to buy from the given list:
audio
cameras
computer_peripherals
gaming
health_and_personal_care
laptop_accessories
laptop_and_desktop
smart_home_automation
smart_wearables
storage
tablets
mobiles

|: smart_home_automation.

Select the type of product you would like to buy:
smart_assistants
smart_lights
smart_cameras
smart_switches
smart_door_locks
|: smart_lights.

Here is the top rated product according to your needs:
Brand : Tog
Name and description : Tog LED music bulb hx-015 Smart Bulb
Price(in rupees) : 249
Rating(Out of 5) : 4.86
Total Ratings : 171
```

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=====
Here are some stats to help aid your searching experience-- :
Average Product Price: 349.51724137931035
The price range available here is:
The lowest price is: 140
The highest price is: 2834
The total numbers of reviewers that rated this product subtype: 31358
=====
Since you are a Business ,your auto-budget is set too:
0 - 2834

Do you wish to change this?(Choose Index)
1.Yes
2.No
|: 2.

These are the recommendations based on your budget (Top Rated First):
Brand : Tog
Name and description : Tog LED music bulb hx-015 Smart Bulb
Price(in rupees) : 249
Rating(Out of 5) : 4.86
Total Ratings : 171

Brand : Kmartstore
Name and description : Kmartstore Led Bulb with Bluetooth Speaker Music Light ...
Price(in rupees) : 248
Rating(Out of 5) : 4.66
Total Ratings : 729

Brand : RFV1
Name and description : RFV1 " Led Bulb with Bluetooth Speaker Music Light Bulb...
Price(in rupees) : 273
Rating(Out of 5) : 4.61
Total Ratings : 1620

Brand : CKT
Name and description : CKT Bluetooth Multi Color RGB Led Music Light Bulb For ...
Price(in rupees) : 254
Rating(Out of 5) : 4.49
Total Ratings : 118

Brand : GIVON
Name and description : GIVON Smart LED Music Light Bulb with Bluetooth 1002 Sm...
Price(in rupees) : 281
Rating(Out of 5) : 4.39
Total Ratings : 1318

Brand : Geet
Name and description : Geet Multicolor Smart LED Music Light Bulb with Bluetoo...
Price(in rupees) : 254
Rating(Out of 5) : 4.33
Total Ratings : 1279

Brand : Ziltos
Name and description : Ziltos Macee Magnetic attachable Sewing Machine LED Lii...
Price(in rupees) : 239
Rating(Out of 5) : 4.23
Total Ratings : 1883
```

```

Brand : Choose
Name and description : Choose The Correct Choose The Correct® B22 Bluetooth Sm...
Price(in rupees) : 303
Rating(Out of 5) : 4.22
Total Ratings : 894

Brand : ENETLY
Name and description : ENETLY LED Wireless Light Bulb Speaker, Smart Music Bul...
Price(in rupees) : 252
Rating(Out of 5) : 4.19
Total Ratings : 1444

Brand : SAGEPL
Name and description : SAGEPL 36 watt small Foldable Light, Fan Blade shaped L...
Price(in rupees) : 212
Rating(Out of 5) : 4.17
Total Ratings : 1368

Brand : Hive
Name and description : Hive 360 Degree Rotating Star Moon Night Light Lamp, wi...
Price(in rupees) : 293
Rating(Out of 5) : 4.1
Total Ratings : 650

Brand : Pick
Name and description : Pick Ur Needs Multicoloured Disco Bulb Smart Bulb
Price(in rupees) : 287
Rating(Out of 5) : 4.05
Total Ratings : 951

Brand : GIVON
Name and description : GIVON SMART LIGHT MUSIC BULB WITH BLUETOOTH 1003 Smart ...
Price(in rupees) : 291
Rating(Out of 5) : 3.76
Total Ratings : 1273

Brand : rci
Name and description : rci Rotating 360 Degree Bulb Magic Disco LED Crystal Li...
Price(in rupees) : 140
Rating(Out of 5) : 3.73
Total Ratings : 241

Brand : INR
Name and description : INR MOBITECH Multi Color Changing RGB Led Music Light B...
Price(in rupees) : 247
Rating(Out of 5) : 3.71
Total Ratings : 1139

Brand : Voiture
Name and description : Voiture 20 LED Solar Wall Lamp Outdoor Waterproof PIR M...
Price(in rupees) : 236
Rating(Out of 5) : 3.68
Total Ratings : 1169

Brand : UNITIX
Name and description : UNITIX LED Motion Sensor Light, USB Rechargeable LED Ni...
Price(in rupees) : 181
Rating(Out of 5) : 3.44
Total Ratings : 272

Brand : ATSolutions
Name and description : ATSolutions Mini Wireless Bluetooth Speaker with Super ...
Price(in rupees) : 239
Rating(Out of 5) : 3.43

Brand : Samite
Name and description : Samite 50 Watts Super Bright LED RGB Gaming Game Light ...
Price(in rupees) : 199
Rating(Out of 5) : 3.37
Total Ratings : 1409

Brand : VEDRID
Name and description : VEDRID 30 W Decorative B22 Fan Design Bulb with attract...
Price(in rupees) : 159
Rating(Out of 5) : 3.31
Total Ratings : 1910

Brand : Wishbazaar
Name and description : Wishbazaar Best Quality Multi Colour LED Light Crystal ...
Price(in rupees) : 141
Rating(Out of 5) : 3.29
Total Ratings : 1700

Brand : Welrock
Name and description : Welrock Adjustable Color LED Music Bulb Ceiling Lamp
Price(in rupees) : 297
Rating(Out of 5) : 3.09
Total Ratings : 685

Brand : Shailputri
Name and description : Shailputri TM 18 Colour Changing Smart Led Music Bulb R...
Price(in rupees) : 278
Rating(Out of 5) : 3.05
Total Ratings : 1601

Brand : MVS
Name and description : MVS BT Light Bulb Smart Bulb
Price(in rupees) : 279
Rating(Out of 5) : 3.04
Total Ratings : 1214

Brand : Online
Name and description : Online Generation Bluetooth Speaker Music Light Bulb B2...
Price(in rupees) : 276
Rating(Out of 5) : 3.03
Total Ratings : 733

Would you like to get recommendations based on brands?(ChooseIndex)
1.Yes
2.No

[:] 1.
Pick a brand from the brands available(Please write the name within double inverted commas):
Tog
Marketstore
RFV1
Homehop
CKT
Ziltos
GIVON
Geet
Choose
Systel
ENETLY
SAGEPL
Hive
Pick
rci

```

```
Name and description : Shailputri TM 18 Colour Changing Smart Led Music Bulb R...
Price(in rupees) : 279
Rating(Out of 5) : 3.85
Total Ratings : 1681

Brand : MVS
Name and description : MVS BT Light Bulb Smart Bulb
Price(in rupees) : 279
Rating(Out of 5) : 3.84
Total Ratings : 1214

Brand : Online
Name and description : Online Generation Bluetooth Speaker Music Light Bulb B2...
Price(in rupees) : 276
Rating(Out of 5) : 3.83
Total Ratings : 733

Would you like to get recommendations based on brands?(ChooseIndex)
1.Yes
2.No

[: 1.
Pick a brand from the brands available(Please write the name within double inverted commas):
[og
Kmartstore
RFV1
Homehop
CKT
Ziltos
GIVON
Geetc
Choucas
Syska
ENETLY
SAGEPL
Hive
Pick
rcr
BMW
Veiture
NREMI
UNITIX
ATSolutions
Samite
VEDRID
WishBazaar
WeRock
Shailputri
MVS
Online

[: "Hive"
Brand : Hive
Name and description : Hive 360 Degree Rotating Star Moon Night Light Lamp, wi...
Price(in rupees) : 293
Rating(Out of 5) : 4.1
Total Ratings : 658
Would you like to search for more products?(1,0)
[: 0.

THANKYOU FOR USING JCT RECOMMENDATION SYSTEM
true .

?-
```