I Have the this table

#	TYPE	MATERIAL	PLACEMENT	PETS	AMENTIE	PRICE	AREA	BEDROOMS	BATHROOMS	LEASE LENGTH
1	HOUSE	WOOD	VILLAGE	NO	GARAGEPARKING,FIREPLACE,ELEVATOR,	510	150	3	2	6
2	APARTMENT	STONE	VILLAGE	YES	GARAGEPARKING,FIREPLACE,	600	200	2	4	6
3	HOUSE	WOOD	CITY	YES	FIREPLACE,ELEVATOR,	400	120	4	1	12
4	APARTMENT	BRICK	CITY	NO	ELEVATOR,	230	120	4	2	12

Scenario 1 — by Placement "VILLAGE"

#	TYPE	MATERIAL	PLACEMENT	PETS	AMENTIE	PRICE	AREA	BEDROOMS	BATHROOMS	LEASE LENGTH
1	HOUSE	WOOD	VILLAGE	NO	GARAGEPARKING,FIREPLACE,ELEVATOR,	510	150	3	2	6
2	APARTMENT	STONE	VILLAGE	YES	GARAGEPARKING,FIREPLACE,	600	200	2	4	6

Scenario 2 — by Material "Wood"

#	TYPE	MATERIAL	PLACEMENT	PETS	AMENTIE	PRICE	AREA	BEDROOMS	BATHROOMS	LEASE LENGTH
1	HOUSE	WOOD	VILLAGE	NO	GARAGEPARKING,FIREPLACE,ELEVATOR,	510	150	3	2	6
2	HOUSE	WOOD	CITY	YES	FIREPLACE,ELEVATOR,	400	120	4	1	12

Scenario 3 — by below specific price "500"

#	TYPE	MATERIAL	PLACEMENT	PETS	AMENTIE	PRICE	AREA	BEDROOMS	BATHROOMS	LEASE LENGTH
1	HOUSE	WOOD	CITY	YES	FIREPLACE,ELEVATOR,	400	120	4	1	12
2	APARTMENT	BRICK	CITY	NO	ELEVATOR,	230	120	4	2	12

Scenario 4 — between range of prices 600-400

#	TYPE	MATERIAL	PLACEMENT	PETS	AMENTIE	PRICE	AREA	BEDROOMS	BATHROOMS	LEASE LENGTH
1	HOUSE	WOOD	VILLAGE	NO	GARAGEPARKING,FIREPLACE,ELEVATOR,	510	150	3	2	6

Scenario 5 — below specific area 150

#	TYPE	MATERIAL	PLACEMENT	PETS	AMENTIE	PRICE	AREA	BEDROOMS	BATHROOMS	LEASE LENGTH
1	HOUSE	WOOD	VILLAGE	NO	GARAGEPARKING,FIREPLACE,ELEVATOR,	510	150	3	2	6
2	HOUSE	WOOD	CITY	YES	FIREPLACE,ELEVATOR,	400	120	4	1	12
3	APARTMENT	BRICK	CITY	NO	ELEVATOR,	230	120	4	2	12

Scenario 6 — between range of area 120-200

#	TYPE	MATERIAL	PLACEMENT	PETS	AMENTIE	PRICE	AREA	BEDROOMS	BATHROOMS	LEASE LENGTH
1	HOUSE	WOOD	VILLAGE	NO	GARAGEPARKING,FIREPLACE,ELEVATOR,	510	150	3	2	6

Scenario 7 — Number of bathrooms 4

#	TYPE	MATERIAL	PLACEMENT	PETS	AMENTIE	PRICE	AREA	BEDROOMS	BATHROOMS	LEASE LENGTH
1	APARTMENT	STONE	VILLAGE	YES	GARAGEPARKING,FIREPLACE,	600	200	2	4	6

Scenario 8 — Number of bedrooms 4

#	TYPE	MATERIAL	PLACEMENT	PETS	AMENTIE	PRICE	AREA	BEDROOMS	BATHROOMS	LEASE LENGTH
1	HOUSE	WOOD	CITY	YES	FIREPLACE,ELEVATOR,	400	120	4	1	12
2	APARTMENT	BRICK	CITY	NO	ELEVATOR,	230	120	4	2	12

Scenario 9 — Allow Pets "YES"

#	TYPE	MATERIAL	PLACEMENT	PETS	AMENTIE	PRICE	AREA	BEDROOMS	BATHROOMS	LEASE LENGTH
1	APARTMENT	STONE	VILLAGE	YES	GARAGEPARKING,FIREPLACE,	600	200	2	4	6
2	HOUSE	WOOD	CITY	YES	FIREPLACE,ELEVATOR,	400	120	4	1	12

Scenario 10 — Type "Apartment"

#	TYPE	MATERIAL	PLACEMENT	PETS	AMENTIE	PRICE	AREA	BEDROOMS	BATHROOMS	LEASE LENGTH
1	APARTMENT	STONE	VILLAGE	YES	GARAGEPARKING,FIREPLACE,	600	200	2	4	6
2	APARTMENT	BRICK	CITY	NO	ELEVATOR,	230	120	4	2	12

Scenario 11 — By Lease Length "6"

#	TYPE	MATERIAL	PLACEMENT	PETS	AMENTIE	PRICE	AREA	BEDROOMS	BATHROOMS	LEASE LENGTH
1	HOUSE	WOOD	VILLAGE	NO	GARAGEPARKING,FIREPLACE,ELEVATOR,	510	150	3	2	6
2	APARTMENT	STONE	VILLAGE	YES	GARAGEPARKING,FIREPLACE,	600	200	2	4	6

Scenario 12 — by Amenties "FIREPLACE,ELEVATOR"

#	TYPE	MATERIAL	PLACEMENT	PETS	AMENTIE	PRICE	AREA	BEDROOMS	BATHROOMS	LEASE LENGTH
1	HOUSE	WOOD	CITY	YES	ELEVATOR,FIREPLACE,	400	120	4	1	12

Scenario 13

#	TYPE	MATERIAL	PLACEMENT	PETS	AMENTIE	PRICE	AREA	BEDROOMS	BATHROOMS	LEASE LENGTH
1	APARTMENT	BRICK	CITY	NO	ELEVATOR,	230	120	4	2	12

Finished after 0.417 seconds

Runs: 13/13   Errors: 0   Failures: 0

```
TESTBACK.AcceptencTest [Runner: JUnit 4] (0.250 s)
  Search about suitable home (0.250 s)
    Search home by Placement (0.128 s)
    Search home by Material (0.009 s)
    Search home by below specific price (0.009 s)
    Search home by between range of prices (0.010 s)
    Search home by below specific area (0.007 s)
    Search home by between range of area (0.009 s)
    Search home By Number of bathrooms (0.006 s)
    Search home By Number of bedrooms (0.006 s)
    Search home by Allow Pets (0.006 s)
    Search home By Type (0.006 s)
    Search home By Lease Length (0.007 s)
    Search home by Amenties (0.005 s)
    Search home By Combination (0.041 s)
```

Failure Trace

```gherkin
Feature: Search about suitable home
  Background: The System has a repository of homes with their specifications (type-material-placement-pets-amenties-price-area-bedrooms-bathrooms-leaselength)
  Given  these homes are contained in the system
                |HOUSE_WOOD_VILLAGE_NO_GARAGEPARKING,FIREPLACE,ELEVATOR|510_150_3_2_6|
                |APARTMENT_STONE_VILLAGE_YES_GARAGEPARKING,FIREPLACE|600_200_2_4_6|
                |HOUSE_WOOD_CITY_YES_FIREPLACE,ELEVATOR|400_120_4_1_12|
                |APARTMENT_BRICK_CITY_NO_ELEVATOR|230_120_4_2_12|

  @Tage1
  Scenario: Search home by Placement
  When I search about home by "VILLAGE"
  Then A list of homes that matches the  Placement specification should be returned and printed on the console
  @Tage2
  Scenario: Search home by Material
  When I search about home by  "Wood"
  Then A list of homes that matches the  Material specification should be returned and printed on the console
  @Tage3
  Scenario: Search home by below specific price
  When I search about home by  500
  Then A list of homes that matches the  price specification should be returned and printed on the console
  @Tage4
  Scenario: Search home by between range of prices
  When I search about home by  600 and 400
  Then A list of homes that matches the price between range of specification should be returned and printed on the console
  @Tage5
  Scenario: Search home by below specific area
  When I search about home by area 150
  Then A list of homes that matches the  area specification should be returned and printed on the console
  @Tage6
  Scenario: Search home by between range of area
  When I search about home by area 120 and 200
  Then A list of homes that matches the area between range of specification should be returned and printed on the console
  @Tage7
  Scenario: Search home By Number of bathrooms
  When I search about home by Number of bathrooms 4
  Then A list of homes that matches the Number of bathrooms specification should be returned and printed on the console
  @Tage8
  Scenario: Search home By Number of bedrooms
  When I search about home by Number of bedrooms 4
  Then A list of homes that matches the Number of bedrooms specification should be returned and printed on the console
  @Tage9
  Scenario: Search home by Allow Pets
  When I search about home by Allow Pets "YES"
  Then A list of homes that matches the Allow Pets specification should be returned and printed on the console
  @Tage10
  Scenario: Search home by Type
  When I search about home by type "Apartment"
  Then A list of homes that matches the  Type specification should be returned and printed on the console
  @Tage11
  Scenario: Search home By Lease Length
  When I search about home by Lease Length 6 monthes
  Then A list of homes that matches the Lease Length specification should be returned and printed on the console
  @Tage12
  Scenario: Search home by Amenties
  When I search about home by Amenties "FIREPLACE,ELEVATOR"
  Then A list of homes that matches the  Amenties specification should be returned and printed on the console
    @Tage13
  Scenario: Search home By Combination
  #note : use "-" and keep " if you dont need to use
  When I search about home by Combination "APARTMENT","-","-","-","ELEVATOR","250","-","-","-","-"
  Then A list of homes that matches the  Combination specification should be returned and printed on the console
```

If all are "-" in Scenario13 should return the hole table as we see in the pitcher

```
60   #note : use "-" and keep " if you dont need to use
61   When I search about home by Combination "-","-","-","-","-","-","-","-","-","-","-"
62   Then A list of homes that matches the  Combination specification should be returned and printed on the console
63
```

Console ✕

<terminated> PRO2020-10 [JUnit] C:\Program Files\Java\jre1.8.0_261\bin\javaw.exe (Oct 3, 2020, 11:37:41 AM)

#	TYPE	MATERIAL	PLACEMENT	PETS	A M E N T I E	PRICE	AREA	BEDROOMS	BATHROOMS	LEASE LENGTH
1	HOUSE	WOOD	VILLAGE	NO	GARAGEPARKING,FIREPLACE,ELEVATOR,	510	150	3	2	6
2	APARTMENT	STONE	VILLAGE	YES	GARAGEPARKING,FIREPLACE,	600	200	2	4	6
3	HOUSE	WOOD	CITY	YES	FIREPLACE,ELEVATOR,	400	120	4	1	12
4	APARTMENT	BRICK	CITY	NO	ELEVATOR,	230	120	4	2	12

Some examples

```
59   Scenario: Search home By Combination
60   #note : use "-" and keep " if you dont need to use
61   When I search about home by Combination "HOUSE","-","-","-","-","-","-","-","-","-","12"
62   Then A list of homes that matches the  Combination specification should be returned and printed on the console
63
```

Console ✕

<terminated> PRO2020-10 [JUnit] C:\Program Files\Java\jre1.8.0_261\bin\javaw.exe (Oct 3, 2020, 11:43:08 AM)

#	TYPE	MATERIAL	PLACEMENT	PETS	A M E N T I E	PRICE	AREA	BEDROOMS	BATHROOMS	LEASE LENGTH
1	HOUSE	WOOD	CITY	YES	FIREPLACE,ELEVATOR,	400	120	4	1	12

```
59   Scenario: Search home By Combination
60   #note : use "-" and keep " if you dont need to use
61   When I search about home by Combination "APARTMENT","BRICK","CITY","NO","ELEVATOR","230","120","4","2","12"
62   Then A list of homes that matches the  Combination specification should be returned and printed on the console
63
```

Console ✕

<terminated> PRO2020-10 [JUnit] C:\Program Files\Java\jre1.8.0_261\bin\javaw.exe (Oct 3, 2020, 11:45:52 AM)

#	TYPE	MATERIAL	PLACEMENT	PETS	A M E N T I E	PRICE	AREA	BEDROOMS	BATHROOMS	LEASE LENGTH
1	APARTMENT	BRICK	CITY	NO	ELEVATOR,	230	120	4	2	12

```
59   Scenario: Search home By Combination
60   #note : use "-" and keep " if you dont need to use
61   When I search about home by Combination "HOUSE","WOOD","-","-","-","550","-","-","-","-"
62   Then A list of homes that matches the  Combination specification should be returned and printed on the console
63
```

Console ✕

<terminated> PRO2020-10 [JUnit] C:\Program Files\Java\jre1.8.0_261\bin\javaw.exe (Oct 3, 2020, 2:24:24 PM)

#	TYPE	MATERIAL	PLACEMENT	PETS	A M E N T I E	PRICE	AREA	BEDROOMS	BATHROOMS	LEASE LENGTH
1	HOUSE	WOOD	VILLAGE	NO	GARAGEPARKING,FIREPLACE,ELEVATOR,	510	150	3	2	6
2	HOUSE	WOOD	CITY	YES	FIREPLACE,ELEVATOR,	400	120	4	1	12

UML

File Edit Navigate Search Project Run Window Help

JUnit

Finished after 0.699 seconds

Runs: 13/13   Errors: 0   Failures: 0

TESTBACK.AcceptencTest [Runner: JUnit 4] (0.36...
- Search about suitable home (0.362 s)
  - Search home by Placement (0.096 s)
  - Search home by Material (0.015 s)
  - Search home by below specific price (0.02...
  - Search home by between range of prices (...
  - Search home by below specific area (0.014...
  - Search home by between range of area (0...
  - Search home By Number of bathrooms (0...
  - Search home By Number of bedrooms (0.0...
  - Search home by Allow Pets (0.013 s)
  - Search home by Type (0.014 s)
  - Search home By Lease Length (0.011 s)
  - Search home by Amenties (0.011 s)
  - Search home By Combination (0.107 s)

Failure Trace

A.java   asf/pom.xml   Checkout.fea...   task1/pom.xml   test.feature   AdditionsSte...   Calc.java   task1/pom.xml   SearchSteps...   *output.ucls

```
<<Java Class>>
    HOMES
    MYCODE

HOMES()
addHouse(DataTable):void
addHouse(HOME):void
checkEmpity():Boolean
printHouse():void
compareArrays(String[],String[]):boolean
searchBYplace(String):HOMES
searchBYMaterial(String):HOMES
search_by_below_specific_price(String):HOMES
search_by_below_specific_price(int):HOMES
searchPyPriceBetweenRange(Integer,Integer):HOMES
search_py_below_specific_area(String):HOMES
search_py_below_specific_area(int):HOMES
searchPyAreaBetweenRange(Integer,Integer):HOMES
search_py_Number_of_bedrooms(Integer):HOMES
search_py_Number_of_bedrooms(String):HOMES
search_py_Number_of_bathrooms(Integer):HOMES
search_py_Number_of_bathrooms(String):HOMES
searchBYAllowPets(String):HOMES
searchBYtype(String):HOMES
search_py_LeaseLength(Integer):HOMES
search_py_LeaseLength(String):HOMES
search_py_Amenties(String):HOMES
checkResultPlace(String):Boolean
checkResultMaterial(String):boolean
checkbelow_specific_price(int):boolean
checkBetween_specific_price(int,int):boolean
checkbelow_specific_area(int):boolean
checkBetween_specific_Area(int,int):boolean
checkNumber_of_bedrooms(int):boolean
checkNumber_of_bathrooms(int):boolean
checkAllow_Pets(String):boolean
checkResultType(String):boolean
checkLeaseLength(int):boolean
checkAmenties(String):boolean
```

-HOMESGROUP
0..*

```
<<Java Class>>
    HOME
    MYCODE

type: String
material: String
placement: String
pets: String
amenties: String[]
price: int
area: int
bedrooms: int
bathrooms: int
leaselength: int

HOME()
getType():String
setType(String):void
getMaterial():String
setMaterial(String):void
getPlacement():String
setPlacement(String):void
getPets():String
setPets(String):void
getAmenties():String[]
setAmenties(String[]):void
getPrice():int
setPrice(int):void
getArea():int
setArea(int):void
getBedrooms():int
setBedrooms(int):void
getBathrooms():int
setBathrooms(int):void
getLeaselength():int
setLeaselength(int):void
```

History   Synchronize   Git Staging   Git Reflog   Properties   Console

<terminated> AcceptencTest (2) [JUnit] C:\Program Files\Java\jdk-11.0.6\bin\javaw.exe (Oct 3, 2020, 12:54:13 PM – 12:54:16 PM)

| 2 | APARTMENT | STONE | VILLAGE | YES | GARAGEPARKING,FIREPLACE, | 600 | 200 | 2 | 4 | 6 |

12:57 PM
10/3/2020