

You have to print all output in the output file specified by main arguments, or you won't get any score.

#### Output format for Data Structure Final Project

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##### 1. NewBike Class License Mile StationName

Example:

Input : NewBike Lady 00000 0 Hongshulin

Output : New bike is received by Station Hongshulin.

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##### 2. JunkIt License

Example:

###### 1. General case.

Input : JunkIt TPI01

Output : Bike TPI01 is deleted from Danshui.

###### 2. If the bike is now being rented.

Input : JunkIt TPI03

Output : Bike TPI03 is now being rented.

###### 3. If the bike doesn't exist.

Input : JunkIt KKK23

Output : Bike KKK23 does not belong to our company.

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##### 3. Rent StationName Class

Example:

###### 1. If there is no bike of specific class in the station.

Input : Rent Danshui Lady

Output : No free bike is available.

###### 2. If there exists a bike of specific class in the station.

Input : Rent Danshui Lady

Output : A bike is rented from Danshui.

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##### 4. Returns StationName License Mile

Example:

Input : Returns Hongshulin 00A03 190

Output : Rental charge for this bike is 1245.

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##### 5. Trans StationName License

Example:

###### 1. General case.

Input : Trans Jingmei 00A09

Output : Bike 00A09 is transferred to Jingmei.

###### 2. If the bike doesn't exist.

Input : Trans Jingmei 0FA09

Output : Bike 0FA09 does not belong to our company.

### 3. If bike is now being rented.

Input : Trans Jingmei 0AA09

Output : Bike 0AA09 is now being rented.

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### 6. Inquire License

output format :

```
License      Mileage      Class      Station
=====
00BC4        50          Lady        Danshui
new line
```

Hint: (c++)

```
#include<iomanip> //using setw()
```

```
std::cout << setw(15) << "License" << setw(15) << "Mileage" << .....
```

Example:

#### 1. If the bike does not exist.

Input : Inquire 00BC4

Output : Bike 00BC4 does not belong to our company.

#### 2. General case.

Input : Inquire 00BC4

Output :

1	License	Mileage	Class	Station
2	=====			
3	00BC4	50	Lady	Danshui
4				

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## 7. StationReport StationName

Print StationName and the following kinds of heaps in it. Each heap is printed from its first node to the last one.

### (1)Free Bike Heaps:

Print "Free Bikes" and the heaps from Electric=0 to Hybrid=3.

### (2)Rented Bike Heap:

Print "Rented Bikes" and then HRent.

Example:

Input : StationReport Danshui

Output :

<div> <div>→</div> <div>30</div> <div>Danshui</div> <div>←</div> </div>				
Free Bikes				
License	Mileage	Class	SubTotal	
=====	=====	=====	=====	
00A03	90	Lady		
=====	=====	=====	=====	
→	15	↔	15	↔
			15	↔
			15	1
				new line
Rented Bikes				
License	Mileage	Class	SubTotal	
=====	=====	=====	=====	
00BC4	50	Lady		
01233	20	Lady		
=====	=====	=====	=====	
				2
				new line
Net	Electric	Lady	Road	Hybrid
=====	=====	=====	=====	=====
185	0	3	0	0
→	12	←		
=====	=====	=====	=====	=====
				new line

## 8. UbikeReport

You need to print the data in the order.

### (1)Free Bikes:

Print the 4 heaps (from Electric=0 to Hybrid=3) of free bikes in each station (from Danshui=0 to Jingmei=11). Each heap is printed from its first node to the last one.

### (2)Rented Bikes:

Print the heaps (from Electric=0 to Hybrid=3) of rented bikes in each station (from Danshui=0 to Jingmei=11). The heap is printed from its first node to the last one.

Example:

Input : UbikeReport

Output :

```

→                                     30 Taipei U-bike
                                     Free Bikes
→ License 12 ← Mileage Class Station Total
=====
    00A03      90      Lady  Danshui
    1DGF1       3   Electric Hongshulin
    2ASD0       0   Electric Hongshulin
    30AS1       1   Electric Hongshulin
    0DGF1       3      Lady Hongshulin
    00AS1       1      Lady Hongshulin
    00001       1      Lady Hongshulin
    00000       0      Lady Hongshulin
    0ASD0       0      Lady Hongshulin
    00A02     100      Lady  Jingmei
    ZXXX3      22      Lady  Jingmei
    0XXX2      18      Lady  Jingmei
    Z2228       1      Lady  Jingmei
    0XXX1      11      Lady  Jingmei
=====
14
new line
      Rented Bikes
→ License 12 ← Mileage Class Station Total
=====
    00BC4      50      Lady  Danshui
    01233      20      Lady  Danshui
=====
2
new line
→ 12 ← Net Electric Lady Road Hybrid
=====
    185         3      13      0      0
=====
new line
```

## 9. NetSearch StationName

- (1) Print StationName
- (2) 15'='
- (3) Print 4 type class net from Electric=0 to Hybrid=3.
- (4) 15'='
- (5) Print total net
- (6) newline

Example

Input : NetSearch Danshui

Output :

```
1 Danshui
2 =====
3 Electric 0
4 Lady 5550
5 Road 0
6 Hybrid 0
7 =====
8 Total 5550
9
```

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## 10. HashReport

Print the hash table using linked list.

Example:

Input : HashReport

Output :

```
1 Hash Table
2 0 00000
3 9 00A02->00A03
```

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