

Program 435a

(fee highway)

Program Description: A turnpike bases it charges on the type of vehicles and the entrance point for that vehicle. Both the vehicle and the gates are coded with consecutive numbers in the following manner.

Vehicle Type		Factor Car Type
1	1.0	Compact Car
2	1.3	Small Car
3	1.6	Mid Size Car
4	2.0	Full size Car
5	2.4	Truck
6	2.7	16 Wheeler
0-4-	T-11	

Gate 1 2 3 4 5	Toll 1.35 2.00 2.50 3.25 4.10
•	4.10
6 7	4.8 5.50
8	6.00



To determine the charge the factor for the car type is multiplied by the toll for the gate the vehicle entered the turnpike. Thus, if a truck (type 5) entered the turnpike at gate 4 the charge would be \$7.80 (\$3.25 X 2.4). Write a program that reads in several pairs of data (vehicle type, Gate number) and outputs the Name of the vehicle type, the toll, the factor, and total bill for turnpike use.

Required Statements: input, output, decision making, loop control, array

Data Location: prog435a.dat

Sample Output:

Car Type	Base Toll	Factor	Cost
Compact Car	\$1.35	1.00	\$ 1.35
Small Car	\$2.50	1.30	\$ 3.25
Mid Size Car	\$4.10	1.60	\$ 6.56
Full Size Car	\$5.50	2.00	\$11.00
Truck	\$2.00	2.40	\$ 4.80
16 Wheeler	\$3.25	2.70	\$ 8.78
Compact Car	\$4.80	1.00	\$ 4.80
Small Car	\$6.00	1.30	\$ 7.80
Mid Size Car	\$1.35	1.60	\$ 2.16
Full Size Car	\$2.50	2.00	\$ 5.00
Truck	\$4.10	2.40	\$ 9.84
16 Wheeler	\$5.50	2.70	\$14.85
Compact Car	\$6.00	1.00	\$ 6.00
Small Car	\$1.35	1.30	\$ 1.75
Mid Size Car	\$2.00	1.60	\$ 3.20
Full Size Car	\$2.50	2.00	\$ 5.00
Truck	\$3.25	2.40	\$ 7.80
16 Wheeler	\$4.10	2.70	\$11.07

