### **Title**

#### Info

A movie in a local theater is in great demand. To help a local charity, the theater owner has decided to donate to the charity a portion of the gross amount generated from the movie. This example designs and implements a program that prompts the user to input the movie name, adult ticket price, child ticket price, number of adult tickets sold, number of child tickets sold, and percentage of the gross amount donated to charity. The program should output the movie name, total number of tickets sold, gross amount, percentage of amount donated, total amount donated, and net sale profits.

### **Implementation**

These are the constants and functions used to calculate the program output.

Tickets Sold -> Adult Tickets Sold + Child Tickets Sold

Adult Sales -> Adult Tickets Sold X Adult Ticket Price

Child Sales -> Child Tickets Sold X Child Ticket Price

Gross Sales -> Adult Sales + Child Sales

Amount Donated -> Gross Sales X Percentage to Donate

Net Sales -> Gross Sales - Amount Donated

# Input

The following user data is needed to calculate the program output.

- Movie Name -> string
- Adult Ticket Price -> float
- Child Ticket Price -> float
- Adult Tickets Sold -> short
- Child Tickets Sold -> short
- Percentage to Donate -> float

### **Example**

```
"What is the price of an adult ticket?" $6.45

"What is the price of a child ticket?" $3.45

"How many adult tickets did you sell?" 1920

"How many student tickets did you sell?" 640

"What percentage would you like to donate?" 10.00%
```

# **Output**

#### The following system data is output by the program.

- Movie Name -> string
- Tickets Sold -> short (unsigned)
- Gross Sales -> float
- Percentage Donated -> float
- Amount Donated -> float
- Net Sales -> float

### **Example**

Movie Name	Journey to Mars
Number of Tickets Sold	2650
Gross Amount	\$ 14592.00
Percentage of Amount Donated	10.00%
Amount Donated	\$ 1459.20
Net Sales	\$ 13132.80

### **Test Data**

Input	Movie	Adult Price	Adult Tickets	Child Price	Child Tickets	Percent Donated
Test 1	Journey to Mars	\$6.45	1920	\$3.45	640	10.00%
Test 2	Time Shift	\$11.30	1446	\$12.79	1136	14.84%
Test 3	Night of the Day of the Dawn	\$2.67	232	\$9.27	1168	2.49%

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Alien,			
Flesh			
Eating,			
Hellbound,			
Zombified			
Living			
Dead Part			
2 in			
Shocking			
2-D			

Output	Movie	Tickets Sold	Gross Sales	Percent Donated	Donation	1
Test 1	Journey to Mars	2650	\$14592.00	10.00%	\$1459.20	\$
Test 2	Time Shift	2582	\$30869.24	14.84%	\$4580.99	\$
Test 3	Night of the Day of the Dawn of the Son of the Bride of the Return of the	1400	\$11446.80	2.49%	\$285.02	\$

Revenge of the Terror of the Attack of the Evil, Mutant, Alien, Flesh Eating, Hellbound, Zombified Living Dead Part 2 in			
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