

Split Bill Program Documentation

Purpose

This program helps to split the expenses in a flat or hostel among all residents. It calculates the total amount each person needs to pay based on rent, food expenses, and electricity usage.

Inputs

The program takes the following inputs from the user:

1. Number of persons staying in the flat/hostel
2. Total rent of the flat/hostel
3. Total food expenses
4. Electricity units spent
5. Charge per unit of electricity

Processing Logic

1. Calculate the total electricity bill by multiplying the units spent by the charge per unit.

```
total_bill = electricity_spend * charge_per_unit
```

2. Calculate the total amount per person by adding rent, food expenses, and electricity bill, then dividing by the number of persons:

```
total_amount = (rent + food + total_bill) / persons
```

Output

The program displays the total amount each person has to pay:

Total amount per person will be: <calculated_amount>

Python Code

```
# Input from user
persons = int(input("Enter number of persons staying in the flat/hostel: "))
rent = int(input("Enter your hostel/flat rent: "))
food = int(input("Enter your total food expenses: "))
electricity_spend = int(input("Enter your electricity units spent: "))
charge_per_unit = float(input("Enter charge per unit: "))

# Calculate total electricity bill
total_bill = electricity_spend * charge_per_unit
```

```
# Calculate total amount per person
total_amount = (rent + food + total_bill) / persons

# Display the result
print("Total amount per person will be: ", total_amount)
```