PF LAB #03
LAB TASK

1. Suppose that the cost of sending an international fax is calculated as follows:
   Service charges $3.00; $.20 per page for the first 10 pages; and $0.10 for each additional page. Design a function that takes the number of pages to be faxed as a parameter. The Function then uses the number of pages to be faxed to calculate and return the amount due.
   Ask user to enter number of pages and pass it to function

2. **Guess a Word**
   Design a function that prompts the user for a word, and then prompts the user for a letter. Your function should count the number of times the letters entered appear in the word, and then continue prompting for new letters.
   The following is a copy of the screen results that might appear after running your program, depending on the data entered.

   Output:

```
Please enter a word: howdy
The word contains 5 characters.
What letter would you like to guess? (Enter zero to quit.) a
There are 0 a's.
What letter would you like to guess? (Enter zero to quit.) e
There are 0 e's.
What letter would you like to guess? (Enter zero to quit.) d
There are 1 d's.
What letter would you like to guess? (Enter zero to quit.) o
There are 1 o's.
What letter would you like to guess? (Enter zero to quit.) y
There are 1 y's.
What letter would you like to guess? (Enter zero to quit.) b
There are 0 b's.
What letter would you like to guess? (Enter zero to quit.) 0
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3. Write a program that takes two number from the user.
   i. Function that output the sum of all even numbers between firstNum and secondNum.
   ii. Function that output the numbers and their squares between firstNum and secondNum

iii. Function that output the square of the odd numbers between firstNum and secondNum

4. Write a function that takes integer as a parameter and outputs if the passed integer is Perfect numbers or not.. How to generate all perfect numbers between given interval using loop

   Perfect number is a positive integer which is equal to the sum of its proper positive divisors.

   For example: 6 is the first perfect number
   Proper divisors of 6 are 1, 2, 3
   Sum of its proper divisors = 1 + 2 + 3 = 6.
   Hence 6 is a perfect number

5. A carpet cleaning company estimates cleaning prices assuming a room size of 10 feet by 12 feet at a cost of $39. Rooms smaller than 10 feet by 12 feet are charged at the standard room size. Rooms larger than 10 by 12 feet are charged the standard rate plus $.25 per square foot for each foot greater than the standard room size. Design a function that takes the size of each room in length and width. Calculate the cost of cleaning the rooms and return the cost.

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Sample Run:
Enter the number of rooms to be cleaned: 3
Enter the width and length of room 1: 8 10
The cost to clean room 1: $39
Enter the width and length of room 2: 10 12
The cost to clean room 2: $39
Enter the width and length of room 3: 14 16
The cost to clean room 3: $65
The total cost of cleaning 3 room(s): $143
```