Python Problems

1. Even Checker:

Write a function called evenChecker that takes a number as an argument and prints whether the number is even or odd inside the function.

2. Fibonacci:

Write a python function that takes the limit as an argument of the Fibonacci series and prints till that limit.

3. Tax Collection:

Write a function called **calculateTax** that takes 3 arguments: your age, salary, and current job designation.

Your first task is to take these arguments as user input and pass these values to the function.

Your second task is to implement the function and calculate the tax as the following conditions:

- NO TAX IF YOU ARE LESS THAN 18 YEARS OLD.
- NO TAX IF YOU ARE THE PRESIDENT OF THE COMPANY
- No tax if you get paid less than 10,000
- 5% tax if you get paid between 10K and 20K
- 10% tax if you get paid more than 20K

Finally return this tax value. Then print the returned value in the function call.

4. Year, month, day Converter:

Write a function which will take 1 argument, number of days.

Your first task is to take the number of days as user input and pass the value to the function.

Your second task is to implement the function and calculate the total number of years, number of months, and the remaining number of days as output. No need to return any value, print inside the function.

5. Show Palindrome:

Write a function called **showPalindromicTriangle** that takes a number as a argument and prints a Palindromic Triangle in the function.

6. Divisor problem:

Write a function which will take 4 arguments. They are:

- starting value(inclusive)
- ending value(exclusive)
- first divisor
- second divisor

Your first task is to take these arguments as user input and pass these values to the function.

Your second task is to implement the function and find all the numbers that are divisible by the <u>first divisor or second divisor but not both</u> from the starting value(inclusive) and ending value(exclusive). Add all the numbers that are divisible and finally return this value. Print the returned value in the function call.

7. Index Remover:

Write a function which will take 2 arguments. They are:

- Sentence
- position

Your first task is to take these arguments as user input and pass these values to the function parameters.

Your second task is to implement the function and remove the characters at the index number which is divisible by the position (Avoid the index number 0 as it will always be divisible by the position, so no need to remove the index 0 character). Finally, add the removed characters at the end of the new string.

Return the value and print the new string.

8. Grocery Shops chart section:

You have been hired as an app developer for the company karon_tumi_bekar. The company plans to make an app for a grocery store where the user can order groceries and see the total amount to be paid in the cart section.

To build this feature, you have to write a function that takes 2 arguments. They are:

- order_items (must be a list)
- location (default value should be set to 'Dhanmondi')

Your first task is to take a list of items from the user. Pass the list into the function parameter along with the optional location (Use default argument technique). (Also, no need to take location as input, pass this any value you want.)

Your second task is to implement the function. In the function, create a dictionary for the items shown in the table. Calculate the total price of the items passed as a list to the function. Additionally, add a delivery fee of 30 taka if the location is Dhanmondi. Otherwise, add a delivery fee of 70 taka. Finally, return the value and print it.

Item	Price(Tk)
Rice	105
Potato	20
Chicken	250
Beef	510
Oil	85