### Python Task Explanation.

### 1. Write a program to find out the prime numbers.

I've taken the input num and executed a for loop from range 2 to the inputted number. I've also added an if statement to the loop that checks to see if the remainder is zero, printing the user that the number is not a prime. I also added a print statement of "prime number" in the else statement.

# 2.write a program to create the equation $(a+b+c) * (a-b-c) * ab + a^2 + b^2 + (abc)^3$ .

Using the map and split functions, I was able to receive an input on a single line, insert it into the pre-defined equation, and display the result.

## 3.urlist = ['wood','knife','axe'] , mylist = ['tree', 'apple', 'mango', 'melon'] - combine two lists.

I have combined those lists using the arithmetic function(+) and printed the output.

### 4.write a program for natural number based on user input.

I have a for loop running that prints each natural number starting at 1 and going up to the user's input.

# 5.write class and function for the equation $sqrt(x1-x2) ^2 + sqrt(y1 - y2)^2$ using try except handling.

I've written a function that has a predefined equation and returns its value when an input is provided. I've also completely added a try except method that tries the function and, in the event that it fails, helps print the prepared message "enter an integer."

# 6.Name = "Guvi python" - write a program to get "python" word from the string.

This was accomplished by using the split function to separate the lines and adding them to a list. I printed the second word of the line using slicing.

#### 7. Using class and function - Write a program for palindrome Ex. Madam.

I developed a function called palindrome that accepts input from a list and enables me to store words in the list following their individual letters. I've made another list with the help of indexing and slicing, and I've used the if statement to determine if it is or isn't a palindrome.

### 8.using file handling – write a text file in ur system with "hello world".

I opened a file in the given path, using the "a" append mode, rewrote the file using the write function, and then closed the file using the close function. On the other hand, I used it to open the file in r mode, which is reading mode. They are now printed in output.

### 9.create option button using tkinter GUI in python.

First, I set up the X Virtual Frame Buffer package. I then imported the operating system to build a virtual display, then I used Thinker to create a button.

## 10.Keep only numbers from the following string x = "89e9jcd^o38829@3%3,/mkl\$w1".

I used the "is.digit" method and run a loop that iterates through the string one at a time, determining if the value was a number or not. If the supplied value is a number, a statement to print it will be written and a new set will be appended.