1. Write a Python program to check if a number is prime.

```python
prime.py > ...
1   num= int ( input("enter a number:"))
2   for i in range(2,num):
3       if num % i==0:
4           print(num,"not a prime")
5           break
6       else:
7               print (num,"prime")
```

```
PROBLEMS   OUTPUT   DEBUG CONSOLE   TERMINAL   PORTS
PS C:\Users\pavit\.vscode\extensions\ms-toolsai.jupyter-renderers-1.3.0> & C
/Users/pavit/.vscode/extensions/ms-toolsai.jupyter-renderers-1.3.0/prime.py
enter a number:8
8 not a prime
PS C:\Users\pavit\.vscode\extensions\ms-toolsai.jupyter-renderers-1.3.0> 
```

2. Write a program to find the largest number in a list.

```python
largest-num.py > ...
1   L=[1,2,3,4,5,6,7,8,9]
2   largest_num = L[0]
3   for number in L:
4       if number>largest_num:
5           largest_num=number
6   print(" largest element is:",largest_num)
```

```
PROBLEMS   OUTPUT   DEBUG CONSOLE   TERMINAL   PORTS
PS C:\Users\pavit\.vscode\extensions\ms-toolsai.jupyter-renderers-1.3.0> & C:/
/Users/pavit/.vscode/extensions/ms-toolsai.jupyter-renderers-1.3.0/largest-num
 largest element is: 9
PS C:\Users\pavit\.vscode\extensions\ms-toolsai.jupyter-renderers-1.3.0>
```

3. Create a calculator using Python functions.

```
calculator.py > ...
1    print("two number below")
2    a=int(input("enter first number:"))
3    b= int(input("enter second number;"))
4    ch=0
5    while ch<5:
6        print("cacalculator menu")
7        print(" 1.add")
8        print("2.subtract")
9
10       ch=int(input("enter choice:"))
11       if ch==1:
12           c=a+b
13           print("sum:",c)
14       elif ch==2:
15           c=a-b
16           print("difference;",c)
17       else:
18           print(" wrong")
19
20
```

PROBLEMS   OUTPUT   DEBUG CONSOLE   TERMINAL   PORTS

```
Users/pavit/.vscode/extensions/ms-toolsai.jupyter-renderers-1.3
wo number below
nter first number:10
nter second number;4
acalculator menu
1.add
.subtract
nter choice:2
ifference; 6
acalculator menu
1.add
.subtract
nter choice:1
```

\

4. Write a program to count vowels in a string.

```
largest-num.py > ...
1    s=input("enter string:")
2    vowels="aeiouAEIOU"
3    count=0
4    for char in s:
5        if char in vowels:
6            count+=1
7            print("num of vowels:",count)
```

PROBLEMS   OUTPUT   DEBUG CONSOLE   TERMINAL   PORTS

PS C:\Users\pavit\.vscode\extensions\ms-toolsai.jupyter-renderers-1.3.0> & C:/Us
/Users/pavit/.vscode/extensions/ms-toolsai.jupyter-renderers-1.3.0/largest-num.py
enter string:list
num of vowels: 1
PS C:\Users\pavit\.vscode\extensions\ms-toolsai.jupyter-renderers-1.3.0>

5. Write a Python program to read and write files.

```
text read.py > ...
1    file=open("example.txt","r")
2    file.write(" hello team")
3
4    file.close()
5    |
```