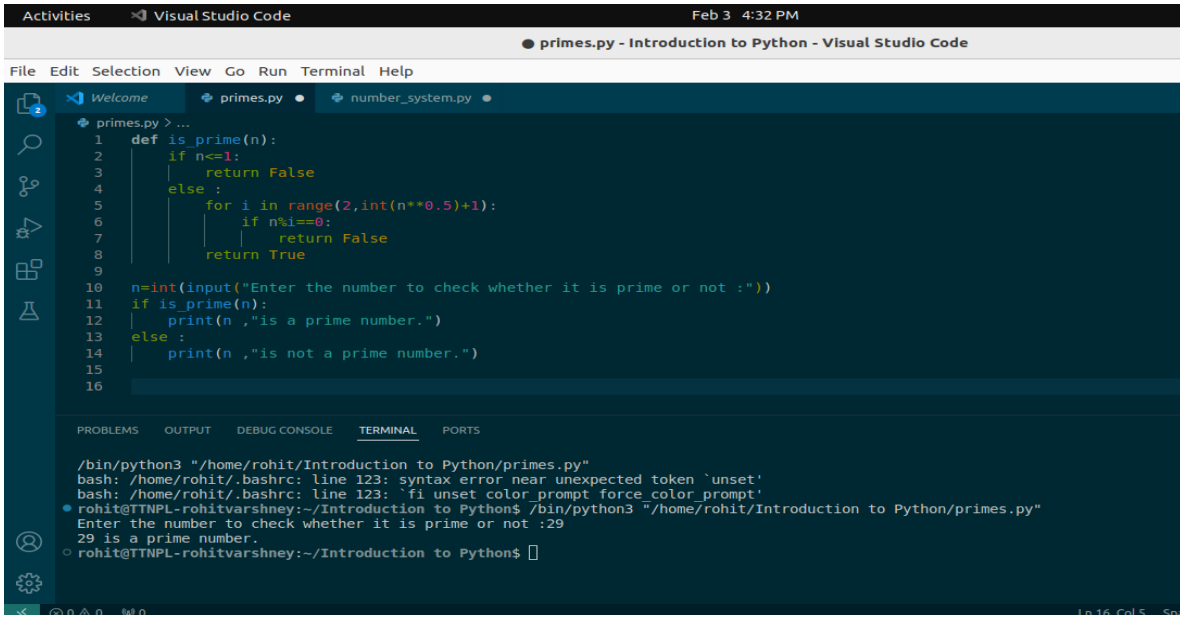
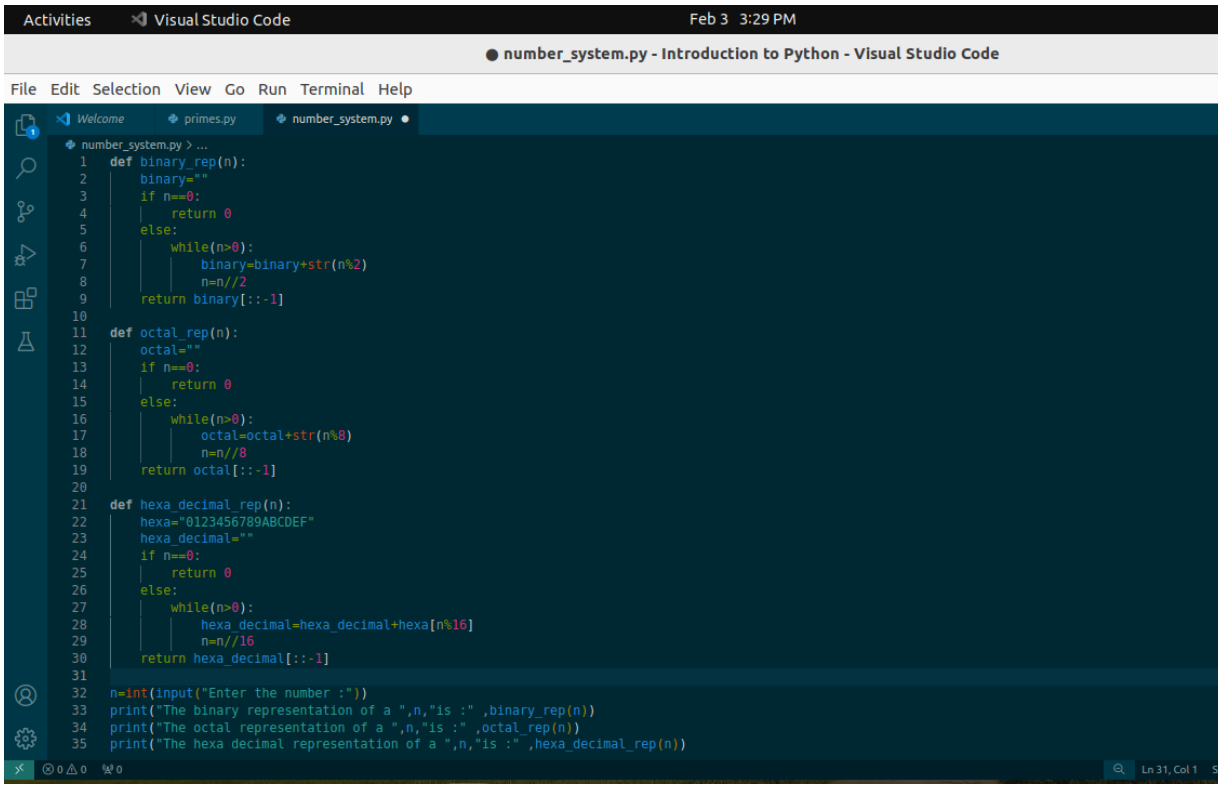
Introduction to Python

1.Write a Python script to test if a number is prime or not? - The Script name: primes.py - Add a functions is_prime() which return boolean True or False - Program should accept a number from console.



2.Write a code to print binary, octal or hexa-deciaml presentation of a number. Do not use any thrid party library.



```
PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL  PORTS

/bin/python3 "/home/rohit/Introduction to Python/number_system.py"
bash: /home/rohit/.bashrc: line 123: syntax error near unexpected token `unset'
bash: /home/rohit/.bashrc: line 123: `fi unset color_prompt force_color_prompt'
rohit@TTNPL-rohitvarshney:~/Introduction to Python$ /bin/python3 "/home/rohit/Introduction to Python/number_system.py"
Enter the number :15
The binary representation of a  15 is : 1111
The octal representation of a  15 is : 17
The hexa decimal representation of a  15 is : F
rohit@TTNPL-rohitvarshney:~/Introduction to Python$
```

PPT Exercise Questions :

1. Given string my_string = ‘Hello Python!’, Reverse the string using slicing, print ’!’ using indexing.

Slicing.py | slicing2.py | format_str.py | dictionary1.py | nested.py | create_set.py | count_i.py | sort_dictionary.py

Slicing.py > ...

```python
def Str_reverse(str):
    return str[::-1]

str="Hello Python!"
result=Str_reverse(str)
print("The reverse of given string is :",result)

# print the "!"
print(result[0])
```

```
PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL  PORTS

bash: /home/rohit/.bashrc: line 123: syntax error near unexpected token `unset'
bash: /home/rohit/.bashrc: line 123: `fi unset color_prompt force_color_prompt'
rohit@TTNPL-rohitvarshney:~/Introduction to Python$ /bin/python3 "/home/rohit/Introduction to Python/Slicing.py"
The reverse of given string is : !nohtyP olleH
!
rohit@TTNPL-rohitvarshney:~/Introduction to Python$
```

2. Use slicing to get word “frain” from “information”.

Slicing.py | slicing2.py | format_str.py | dictionary1.py | nested.py | create_set.py | count_i.py | sort_dictionary.py

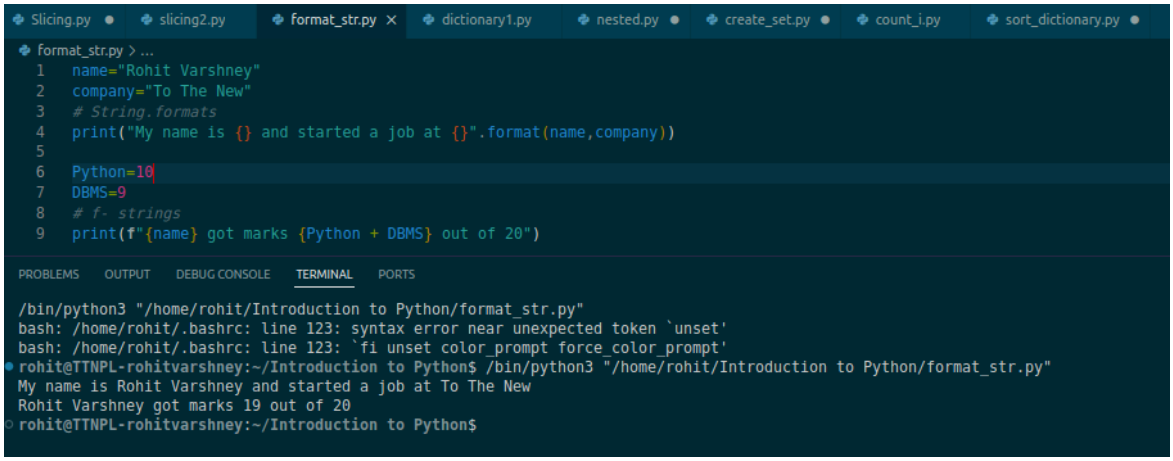
slicing2.py > ...

```python
str2="information"
# Getting word "frain" from "information"
result=str2[2::2]
print(result)
```

```
PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL  PORTS

/bin/python3 "/home/rohit/Introduction to Python/slicing2.py"
bash: /home/rohit/.bashrc: line 123: syntax error near unexpected token `unset'
bash: /home/rohit/.bashrc: line 123: `fi unset color_prompt force_color_prompt'
rohit@TTNPL-rohitvarshney:~/Introduction to Python$ /bin/python3 "/home/rohit/Introduction to Python/slicing2.py"
frain
rohit@TTNPL-rohitvarshney:~/Introduction to Python$
```

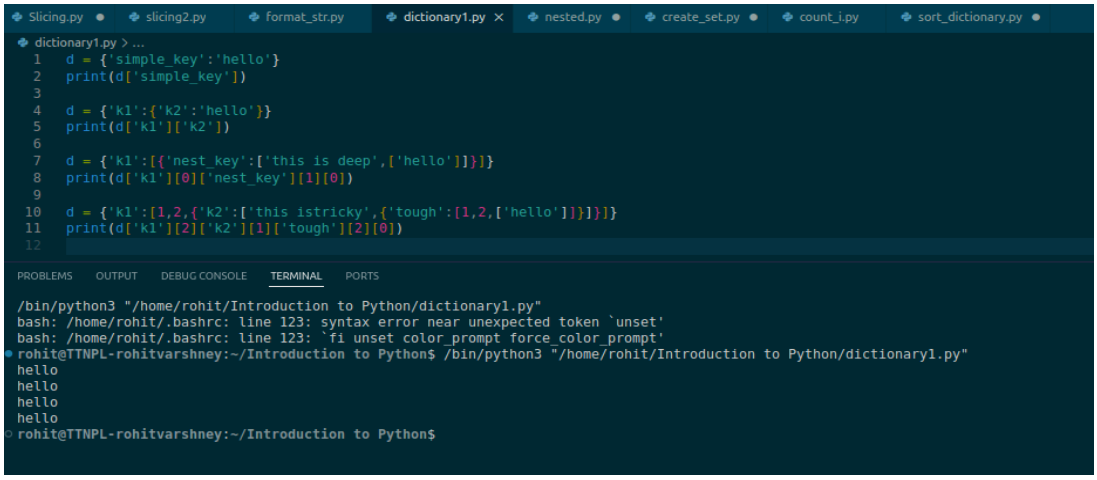
3. Using examples explain string.format and f-strings



4. Can we sort a dictionary? Why or why not?

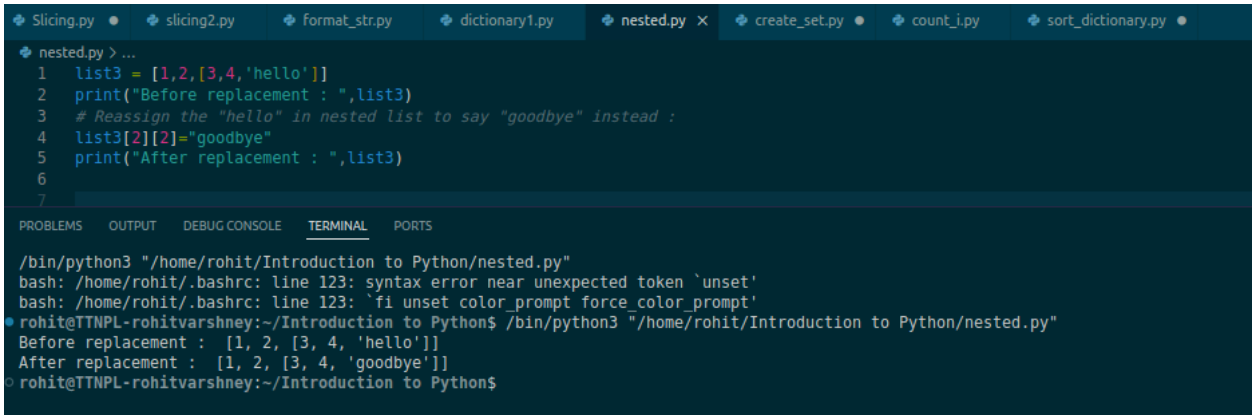
5. Using keys and indexing, grab the 'hello' from the following dictionaries:

- d = {'simple_key':'hello'}
- d = {'k1':{'k2':'hello'}}
- d = {'k1':[{'nest_key':['this is deep',['hello']]}]}
- d = {'k1':[1,2,{'k2':['this is tricky',{'tough':[1,2,['hello']]}]}]}



6. Reassign 'hello' in this nested list to say 'goodbye' instead:

list3 = [1,2,[3,4,'hello']]



7. From the given list list5 create a set
list5 = [1,2,2,33,4,4,11,22,3,3,2]

8. In string information count the total number of i.