

1. Which of the following operators is used to calculate remainder in a division?

Ans – C

2. In python 2//3 is equal to?

Ans – B

3. In python, 6<<2 is equal to?

Ans – C

4. In python, 6&2 will give which of the following as output?

Ans – A

5. In python, 6|2 will give which of the following as output?

Ans – D

6. What does the finally keyword denotes in python?

Ans – C

7. What does raise keyword is used for in python?

Ans – A

8. Which of the following is a common use case of yield keyword in python?

Ans – C

9. Which of the following are the valid variable names?

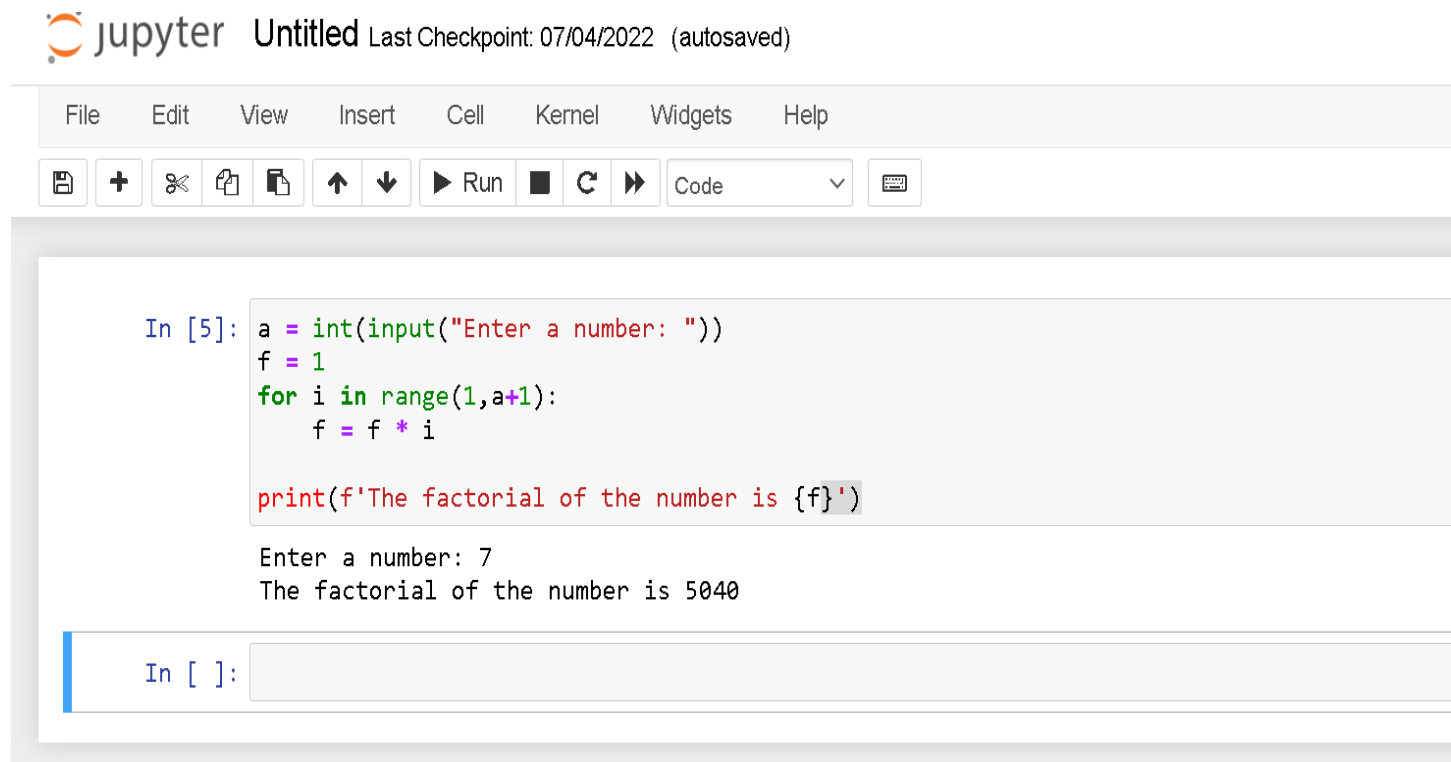
Ans – D

10. Which of the following are the keywords in python?

Ans – A and B

11. Write a python program to find the factorial of a number.

Ans –



The image shows a Jupyter Notebook interface. At the top, the title bar says "Jupyter Untitled" followed by "Last Checkpoint: 07/04/2022 (autosaved)". Below the title bar is a menu bar with options: File, Edit, View, Insert, Cell, Kernel, Widgets, and Help. Under the menu bar is a toolbar with icons for saving, adding, deleting, copying, pasting, undo, redo, and running code. The main area of the notebook contains a code cell with the following Python code:

```
In [5]: a = int(input("Enter a number: "))
f = 1
for i in range(1,a+1):
    f = f * i

print(f'The factorial of the number is {f}')
```


Below the code cell, the output is displayed:

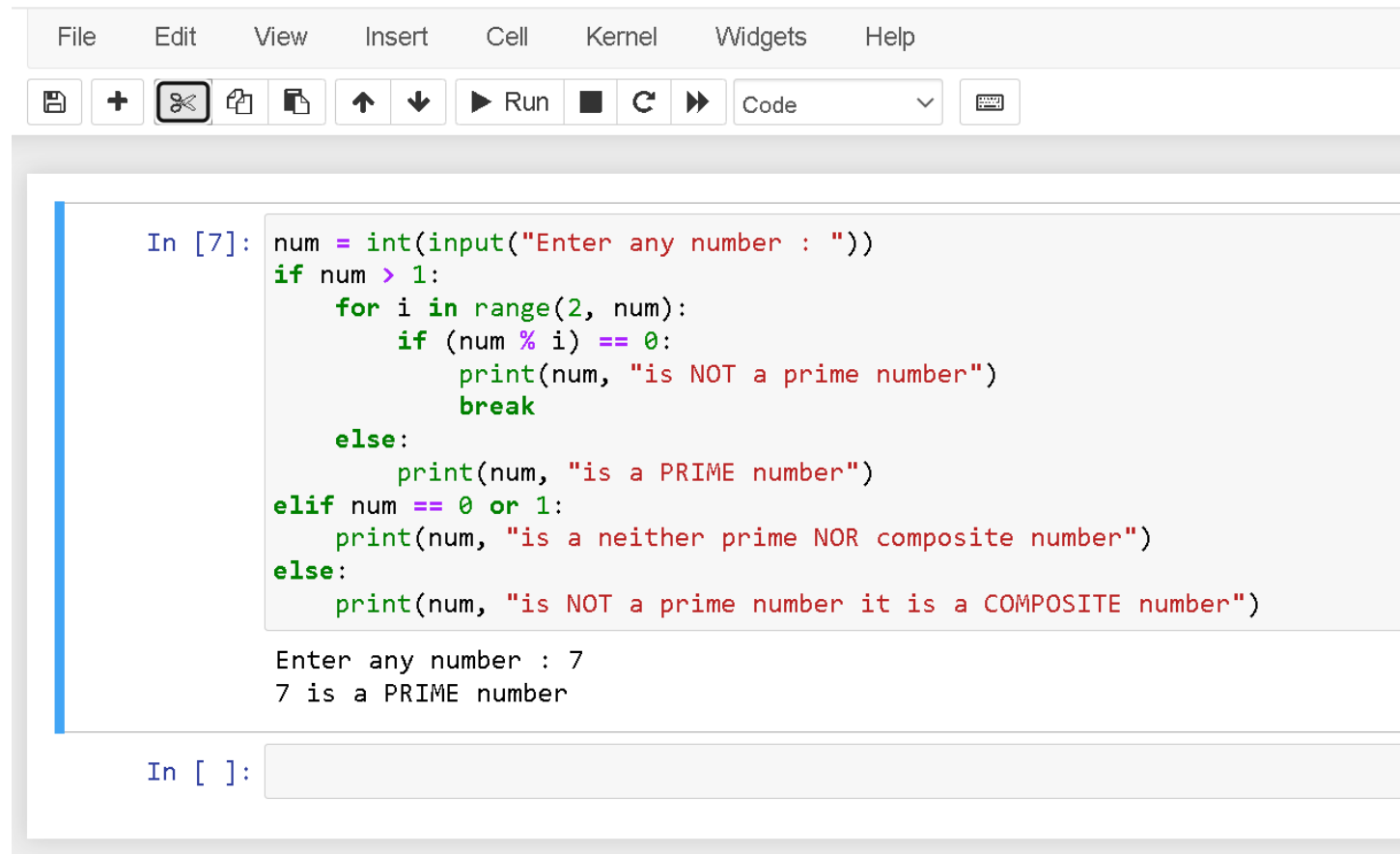
```
Enter a number: 7
The factorial of the number is 5040
```

At the bottom of the notebook, there is an empty code cell with the prompt "In []:".

12. Write a python program to find whether a number is prime or composite.

Ans -

 jupyter Untitled Last Checkpoint: 07/04/2022 (unsaved changes)



The screenshot shows a Jupyter Notebook window titled 'Untitled'. The menu bar includes File, Edit, View, Insert, Cell, Kernel, Widgets, and Help. Below the menu is a toolbar with icons for saving, adding, deleting, and running cells. The main area contains a code cell with the following Python code:

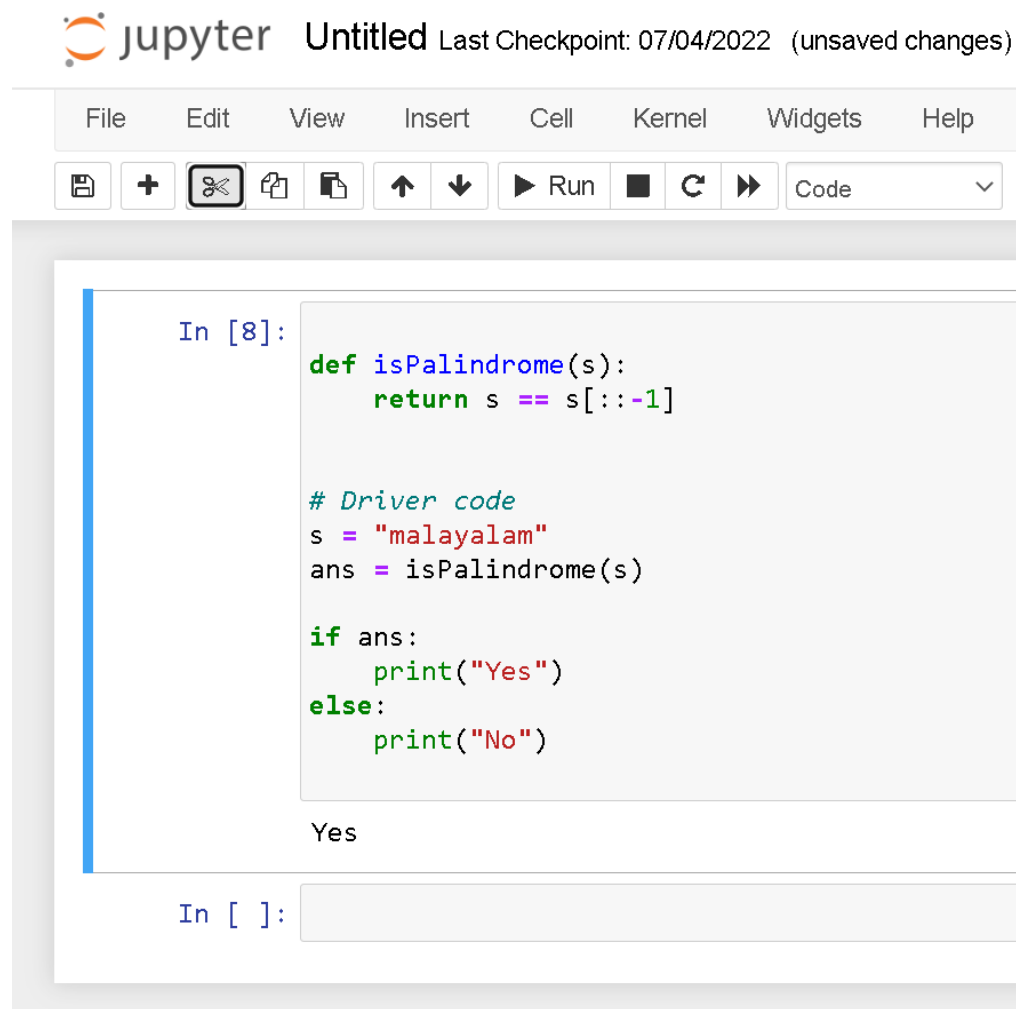
```
In [7]: num = int(input("Enter any number : "))
if num > 1:
    for i in range(2, num):
        if (num % i) == 0:
            print(num, "is NOT a prime number")
            break
    else:
        print(num, "is a PRIME number")
elif num == 0 or 1:
    print(num, "is a neither prime NOR composite number")
else:
    print(num, "is NOT a prime number it is a COMPOSITE number")

Enter any number : 7
7 is a PRIME number
```

Below the code cell is an empty input prompt: `In []:`

13. Write a python program to check whether a given string is palindrome or not.

Ans -




The image shows a Jupyter Notebook interface. At the top, the title bar says "jupyter Untitled" with a timestamp "Last Checkpoint: 07/04/2022 (unsaved changes)". Below the title bar is a menu bar with options: File, Edit, View, Insert, Cell, Kernel, Widgets, and Help. Under the menu bar is a toolbar with icons for saving, adding, editing, running, and other functions. The main area of the notebook contains a code cell labeled "In [8]:". The code in the cell is a Python program that defines a function `isPalindrome(s)` which returns `s == s[::-1]`. Below the function definition is a comment `# Driver code`, followed by the assignment `s = "malayalam"`, the function call `ans = isPalindrome(s)`, and a conditional statement `if ans:` that prints "Yes" if the string is a palindrome, otherwise it prints "No". The output of the cell is "Yes". Below the code cell is an empty input cell labeled "In []:".

```
In [8]: def isPalindrome(s):  
        return s == s[::-1]  
  
        # Driver code  
        s = "malayalam"  
        ans = isPalindrome(s)  
  
        if ans:  
            print("Yes")  
        else:  
            print("No")  
  
        Yes  
  
In [ ]:
```

14. Write a Python program to get the third side of right-angled triangle from two given sides.

Ans -

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```
File Edit View Insert Cell Kernel Widgets Help
[Save] [New] [Close] [Copy] [Paste] [Up] [Down] [Run] [Stop] [Refresh] [Next] Code [Keyboard]
```

```
In [9]: def pythagoras(opposite_side,adjacent_side,hypotenuse):
        if opposite_side == str("x"):
            return ("Opposite = " + str(((hypotenuse**2) - (adjacent_side**2)**0.5))
        elif adjacent_side == str("x"):
            return ("Adjacent = " + str(((hypotenuse**2) - (opposite_side**2)**0.5))
        elif hypotenuse == str("x"):
            return ("Hypotenuse = " + str(((opposite_side**2) + (adjacent_side**2)**0.5))
        else:
            return "You know the answer!"

print(pythagoras(3,4,'x'))
print(pythagoras(3,'x',5))
print(pythagoras('x',4,5))
print(pythagoras(3,4,5))

Hypotenuse = 5.0
Adjacent = 4.0
Opposite = 3.0
You know the answer!
```



```
In [ ]:
```

15. Write a python program to print the frequency of each of the characters present in a given string.

Ans -

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File Edit View Insert Cell Kernel Widgets Help

        Run    Code  

```
In [13]: # initializing string
test_str = "GeeksforGeeks"
all_freq = {}

for i in test_str:
    if i in all_freq:
        all_freq[i] += 1
    else:
        all_freq[i] = 1

print("Count of all characters in GeeksforGeeks is :\n "
      + str(all_freq))

Count of all characters in GeeksforGeeks is :
{'G': 2, 'e': 4, 'k': 2, 's': 2, 'f': 1, 'o': 1, 'r': 1}
```

In []: