

X


<https://swayam.gov.in>

[https://swayam.gov.in/nc\\_details/NPTEL](https://swayam.gov.in/nc_details/NPTEL)

rohit3888kumar@gmail.com ▾

**NPTEL (<https://swayam.gov.in/explorer?ncCode=NPTEL>) » The Joy of Computing using Python (course)**


## Course outline

How does an NPTEL online course work?

**Week 0**

**Week 1**

**Week 2**

**Week 3**

**week 4**

**Week 5**

**Week 6**

☐ Substitution Cipher -The science of secrecy (unit? unit=124&lesson=125)

☐ Substitution Cipher -The science of secrecy 01

# Week 6: Assignment 6

The due date for submitting this assignment has passed.

**Due on 2021-09-08, 23:59 IST.**

**Assignment submitted on 2021-09-07, 00:38 IST**

1) If PYTHON is SVWERK, what is COMPUTING?

**1 point**

- ☒ FLPMXQLKJ  
☐ FRPSXWLQJ  
☐ Insufficient data  
☐ ZLJMSQFKD

Yes, the answer is correct.

Score: 1

Accepted Answers:

*FLPMXQLKJ*

2) What operation will the following program do?

**1 point**

(unit?  
unit=124&lesson=126)

- ☐ Substitution  
Cipher -The  
science of  
secrecy 02  
(unit?  
unit=124&lesson=127)

- ☐ Substitution  
Cipher -The  
science of  
secrecy 03  
(unit?  
unit=124&lesson=128)

- ☐ Tic Tac Toe -  
Down the  
memory Lane  
(unit?  
unit=124&lesson=129)

- ☐ Tic Tac Toe -  
Down the  
memory Lane  
01 (unit?  
unit=124&lesson=130)

- ☐ Tic Tac Toe -  
Down the  
memory Lane  
02 (unit?  
unit=124&lesson=131)

- ☐ Tic Tac Toe -  
Down the  
memory Lane  
03 (unit?  
unit=124&lesson=132)

- ☐ Tic Tac Toe -  
Down the  
memory Lane  
04 (unit?  
unit=124&lesson=133)

- ☐ Tic Tac Toe -  
Down the  
memory Lane  
05 (unit?  
unit=124&lesson=134)

- ☐ Recursion  
(unit?  
unit=124&lesson=135)

- ☐ Recursion 01  
(unit?)

```
import string
s="hello"
n=""
for i in range(len(s)):
    c=int(ord(s[i])-26)
    n=n+chr(c)
print(n)
```

- ☒ Shift the letter by 6 to the right and then print the capital of that letter.  
☐ Shift the letter by 6 to the left and then print the capital of that letter.  
☐ Shift the letter by 6 to the right and then print the small letter.  
☐ Shift the letter by 6 to the left and then print the small letter.

Yes, the answer is correct.

Score: 1

Accepted Answers:

*Shift the letter by 6 to the right and then print the capital of that letter.*

3) What is the output of the following program?

**1 point**

```
import string
s="hello, and welcome to joy of computing course"
if(s.capitalize()==s[0:1].upper()+s[1:len(s)]):
    print("True")
else:
    print("False")
```

- ☐ False  
☒ True

Yes, the answer is correct.

Score: 1

Accepted Answers:

*True*

4) What will be the output of the following program?

**1 point**

```
import string
s="hello, and welcome to joy of computing course"
print(s[:2].replace("e","l"))
```

- ☐ ll,adwlolt o fcmuigcus  
☒ hlo n lcm ojyo optn orl  
☐ hello, and welcome to jy of computing course  
☐ It will show an error

unit=124&amp;lesson=136)

☐ Recursion 02  
(unit?  
unit=124&lesson=137)

☐ Recursion 03  
(unit?  
unit=124&lesson=138)

☐ Recursion 04  
(unit?  
unit=124&lesson=139)

☐ Recursion 05  
(unit?  
unit=124&lesson=140)

☐ Recursion 06  
(unit?  
unit=124&lesson=141)

☐ Week 6  
Feedback  
Form: The Joy  
of Computing  
using Python  
(unit?  
unit=124&lesson=142)

☒ **Quiz: Week 6:  
Assignment 6  
(assessment?  
name=307)**

☒ Week 6:  
Programming  
Assignment 1 -  
Matrix  
(/noc21\_cs75/progassignment?  
name=309)

☒ Week 6:  
Programming  
Assignment 2 -  
Number  
Triangle I  
(/noc21\_cs75/progassignment?  
name=310)

☒ Week 6:  
Programming  
Assignment 3 -  
Symmetric  
Matrix  
(/noc21\_cs75/progassignment?  
name=311)

## Week 7

Yes, the answer is correct.  
Score: 1

Accepted Answers:  
*hlo n lcm ojyo optn orl*

5) The array object in NumPy is called ndarray and NumPy is faster than Lists. State whether the above statement is true or false. **1 point**

- ☒ True  
☐ False

Yes, the answer is correct.  
Score: 1

Accepted Answers:  
*True*

6) What is the output of the following program? ( Assuming that k and n are any 2 positive numbers) **1 point**

```
def fun(k,n):
    if(n==0):
        return 1
    else:
        return(k*fun(k,n-1))

print(fun(k,n))
```

- ☐ It will find the value of k raised to the power of k  
☐ It will find the value of n raised to the power of k  
☒ It will find the value of k raised to the power of n  
☐ It will find the value of n raised to the power of n

Yes, the answer is correct.  
Score: 1

Accepted Answers:  
*It will find the value of k raised to the power of n*

7) The output of the following program is as follows **1 point**

```
[[ 1 4 13]
 [ 2 2 9]
 [ 3 3 6]]
```

What should be written in the empty blank in the following program to get the above desired output?

```
import numpy
arr=numpy.array([[1,2,3],[4,2,3],[13,9,6]])
print(_____)
```

- ☐ numpy.transpose(arr)

Week 8

Week 9

Week 10

Week 11

Week 12

Text Transcripts

Download  
Videos

Live Session

October 10  
Programming  
test - Session 1  
(10AM to 11AM)

October 10  
Programming  
test - Session 2  
(8PM to 9PM)

- ☐ arr.transpose( )  
☒ Either a or b options can be used  
☐ arr.reverse( )

Yes, the answer is correct.

Score: 1

Accepted Answers:

*Either a or b options can be used*

8) Which of the following programs will calculate the factorial of a given number?

**1 point**

☐

```
def fact(n):
    if(n==0):
        return 1
    else:
        return(n*fact(n+1))

n=int(input("Enter the number whose factorial has to be calculated\n"))
if(n<0):
    print("Enter a valid number")
print("The factorial of",n,"is",fact(n))
```

☐

```
def fact(n,t):
    if(t==n):
        return n
    else:
        return t*fact(n,t+1)

n=int(input("Enter the number whose factorial has to be calculated\n"))
if(n<0):
    print("Enter a valid number")
print("The factorial of",n,"is",fact(n,0))
```

☒

```
def fact(n,t):
    if(t==n):
        return n
    else:
        return t*fact(n,t+1)

n=int(input("Enter the number whose factorial has to be calculated\n"))
if(n<0):
    print("Enter a valid number")
print("The factorial of",n,"is",fact(n,1))
```

- ☐ None of the following

Yes, the answer is correct.

Score: 1

Accepted Answers:

```
def fact(n,t):  
    if(t==n):  
        return n  
    else:  
        return t*fact(n,t+1)  
  
n=int(input("Enter the number whose factorial has to be calculated\n"))  
if(n<0):  
    print("Enter a valid number")  
print("The factorial of",n,"is",fact(n,1))
```

OR

None of the following

9) In tic tac toe game, if player 1 starts the game by marking 'X' in the center of the matrix, **1 point** then he has more chances of winning. State whether the above given statement is true or false.

- ☒ True  
☐ False

Yes, the answer is correct.

Score: 1

Accepted Answers:

*True*

10) Recursive programs are faster than the iterative programs. State whether the following **1 point** statement is true or false.

- ☐ True  
☒ False

Yes, the answer is correct.

Score: 1

Accepted Answers:

*False*