

```
'''For taking length of string
First take input of string'''

string = "Python is a case sensitive language"

#len() is used for taking length of given string.
print("A) Length of the given string: ",len(string),"\n")

# This is for giving output string in reverse order.
print("B) Reverse of the given string is :")
print(string[::-1],"\n")

#slicing the string.
new_string = string[10:26]
print("C) New sliced string is: ", "\n", new_string, "\n")

#replace a string using replace fun. in string slicing,
Replaced_string= string.replace('a case sensitive' , 'object oriented')
print("D) String after replacing: ", "\n" ,Replaced_string , "\n")

#Finding the index of "a" in the input string.
print("E) Index of substring 'a' is:", string.find("a"), "\n")

#Printing the string without white spaces using replace in string.
print("F) Sting without white spaces: ", "\n", string.replace(" ", ""))
```

Answer_2.py - C:\Users\hp\Desktop\Answer_2.py (3.10.4)

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```
#Taking input from User.
name = str(input("Name of Applicant: "))
'''I have used different data types here
    like int, str and float'''
SID = int(input("Enter your college ID:"))

dep_name = str(input("Enter your department name: "))

cgpa = float(input("Enter your CGPA: "))

'''Here string is formed using multiline comment command which
gives us the string in the same body formate as we write inside this.'''

string= '''Hey, <name> Here!
My SID is <SID>
I am from <dep_name> department and my CGPA is <cgpa>'''

#As the string is replaced multiple times...we use this slicing in the given way
print(string.replace("<name>", name).replace("<SID>", str(SID)).replace("<dep_na
```

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#Use of Bitwise Operators.

a = 56

b = 10

#Use of Bitwise AND(&) operator.

print("A. a & b =", a & b)

#Use of Bitwise OR(|) operator.

print("B. a | b =", a | b)

#Use of Bitwise XOR(^) operator.

print("C. a ^ b =", a ^ b)

#Use of shift(left) operator.

print("D. a << 2 = ", a << 2)

#Use of shift(both) operator.

print("E. a >> 2 = ", a >> 2, " and ", "b >> 4 = ", b >> 4)


```
# Taking input
string= str(input("Enter any string: "))

# Using string slicing to find a word in the string
checked = string.find("name")

# Making a loop for printing yes and no for the required outputs.
# Here '==' is comparison operator
if checked == -1:      # '-1' is the value as an output of find function indicating
    print("No")

else:
    print("Yes")
```

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```
# Taking inputs of the sides of the triangle.
n1 = int(input("Enter First length : "))
n2 = int(input("Enter Second length : "))
n3 = int(input("Enter Third length : "))

# Checking the condition for triangle to be formed.
F1 = n1 > n2 + n3
F2 = n2 > n1 + n3
F3 = n3 > n1 + n2

# Here we check wheather the all conditions are satisfied or not.
Output = str(F1 or F2 or F3)

print("The triangle can be formed?")

# Using string slicing.
print(Output.replace("True", "No!").replace("False", "Yes!"))
```

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Edit  Shell  Debug  Options  Window  Help
Python 3.10.4 (tags/v3.10.4:9d38120, Mar 2
AMD64)] on win32
Type "help", "copyright", "credits" or "li
===== RESTART: C:\Users\hp\D
A) Length of the given string: 35


B) Reverse of the given string is :
egaugnal evitisnes esac a si nohtyP

C) New sliced string is:
a case sensitive

D) String after replacing:
Python is object oriented language

E) Index of substring 'a' is: 10

F) Sting without white spaces:
Pythonisacasesensitivelanguage
```

 IDLE Shell 3.10.4

File Edit Shell Debug Options Window Help

Python 3.10.4 (tags/v3.10.4:9d38120, Mar 23 2022, 23:13:41) [MSC
AMD64] on win32
Type "help", "copyright", "credits" or "license()" for more infor

>>

===== RESTART: C:\Users\hp\Desktop\Answer_2.py =====

Name of Applicant: Dheeraj Sharma

Enter your college ID:21107025

Enter your department name: Mechanical

Enter your CGPA: 9.7

Hey, Dheeraj Sharma Here!

My SID is 21107025

I am from Mechanical department and my CGPA is 9.7

>>

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Answer_3 (1).py - C:\Users\hp\Desktop\Answer_3 (1).py (3.10.4)

File IDLE Shell 3.10.4

File Edit Shell Debug Options Window Help

Python 3.10.4 (tags/v3.10.4:9d38120, Mar 23 2022, 23:13:41) [MSC v.1929 64 bit (AMD64)] on win32

Type "help", "copyright", "credits" or "license()" for more information.

>>>

===== RESTART: C:\Users\hp\Desktop\Answer_3 (1).py =====

A. a & b = 8

B. a | b = 58

C. a ^ b = 50

D. a << 2 = 224

E. a >> 2 = 14 and b >> 4 = 0

>>>

IDLE Shell 3.10.4



File Edit Shell Debug Options Window Help

Python 3.10.4 (tags/v3.10.4:9d38120, Mar 23 2022, 23:13:41) [MSC v.1929 64 bit (AMD64)] on win32

Type "help", "copyright", "credits" or "license()" for more information.

>>>

===== RESTART: C:\Users\hp\Desktop\Answer_4.py =====

Enter any string: HELLO THERE

No

>>>

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Answer_4.py
Answer_4.py

```
*IDLE Shell 3.10.4*

File Edit Shell Debug Options Window Help

Python 3.10.4 (tags/v3.10.4:9d38120, Mar 23 2022, 23:13:41) [MSC v.1929 64 bit
AMD64] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: C:\Users\hp\Desktop\Answer_5.py =====
Enter First length : 19
Enter Second length : 9
Enter Third length : 30
The triangle can be formed?
No!
>>> |
```