

DAILY ASSESSMENT FORMAT

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|---------|--|---------------------|-----------------------------|
| Date: | 21 st July 2020 | Name: | Rajeshwari Gadagi |
| Course: | How to develop pythonic coding rather than python coding | USN: | 4AL17EC076 |
| Topic: | Basics of python programming | Semester & Section: | 6 th sem 'B' sec |

FORENOON SESSION DETAILS

Image of session

The screenshot shows a video conference interface. At the top left, there is a red 'REC' button and a profile picture of the presenter, Badhusha Mohideen, with the text 'Badhusha Mohideen is presenting'. On the right, a sidebar displays the title 'How to develop Pythonic codin...', the number of participants (203), and a 'Chat' button. The main window shows a presentation slide with the title 'first program in google colab'. Below the title, there is a code snippet in Python:

```
#Python Program to Add Two Numbers getting through key board
# sum of two nos
num1 = int(input("Enter first no"))
num2 = int(input("Enter second no"))

# Adding the two numbers
sum = num1 + num2

# Display the sum
print("The sum of {} and {} is {}".format(num1, num2, sum))
```

At the bottom of the presentation slide, there are input fields for 'Enter first no' and 'Enter second no'. To the right of the presentation, a grid of participant icons shows several users, including Nihal 07, Prajwal Kama..., SOORYA, Shilpa.NET, and P. On the far right, a scrollable chat log shows messages from various participants:

- Gouri Shanker 11:48 AM: No doubts sir
- rashmi rk 11:48 AM: No sir
- Nikhil Nikhil 11:48 AM: No sir
- AMBIKA V 11:48 AM: Nope
- Mahantesh G 11:48 AM: no sir
- 4AL18CS087_SPOORTHY VV 11:48 AM: yes sir execute please

At the bottom of the screen, a taskbar shows the date and time as 21-07-2020 13:47, along with icons for various applications.

How to develop pythonic coding rather than python coding - logic perspective.

Day 1 :-

Basics of python programming :-

- Python is a general purpose, interpreted, interactive, object-oriented & high level programming language.
- Fastest growing open source programming language.
- Dynamically typed
- Versatile & can be adapted in DA, ML, GUI, software & web development.
- It was created by Guido van Rossum during 1985-1990.

Python IDEs

- IDLE
- PyCharm
- Google Colab

Comment lines :-

- Single comment line is # Comment Line.
- Multiple comment lines triple single quotes or """

Multiple assignment :-

``` x, y = 2, 3

``` x

2

y

3.

Swapping assignment in python.

x, y = y, x

Indentation & blocks.

- Python does not use braces ({}) to indicate blocks of code for class & function definitions or flow controls.
- Block of code are

Variables,

python
```print(4)

4.

If you are not  
```type(  
class<str>

→ we should use the python variable start with number.

→ keywords cannot be used as variables.

// → floor division.

$a//b = 4$.

$a=10, b=20$.

$a \% b = 0$. [modulo division].

$a**b = 20$ to the power 10.

e.g:-
```first = 10

```Second = 15

```print(first + second)

25.

```first = 'inn'

Functions :-

- A function is a block of organized, reusable code that is used to perform a single, related action.
- Functions provide better modularity for your application & a high degree of code reusing.

Syntax for function definition :-

def functionname(parameters):

 function_suite

 return[expression]

```

def greater(a,b):
    if a>b:
        return a
    else:
        return b
a = int(input('Enter a:'))
b = int(input('Enter b:'))
print('The greater number is', greater(a,b))

catching exceptions using try & except :- and we can handle errors
inp = input('Enter Fahrenheit temperature:')
try:
    fahr = float(inp) // converting string into float
    cel = (fahr - 32.0) * 5.0/9.0
    print(cel)
except:
    print('Please enter a valid number')

```

Day 1 session 2 :-

Iteration & String

for loop :-

a = ['i', 'say', 'hello']

for i in range(len(a)):

print(i, end=' ')

print(a[i]). ↳ space.

Output:-

0 i

1 say

2 hello.

Syntax :-

for var in <collection>:

range of n = 0 to n-1.

→ list is one of the important data structure enclosed by the square bracket.

while loop :-

while condition :
< statements >.

```
i = 0  
while(i < 10):  
    print(i)  
    i += 1
```

Output:-

```
0  
1  
2  
3  
4  
5  
6  
7  
8  
9
```

Output shows first 10 numbers printed to screen.
Each number is followed by a new line.

d = [(1, 'a'), (2, 'b'), (3, 'c'), (4, 'd'), (5, 'e')] \rightarrow List of tuple.
for (x, y) in d:
 print(x, y)

Output:-

```
1 a  
2 b  
3 c  
4 d  
5 e
```

for x in range(5):
 print(x)

Another ex for loop :-

for somechar in "Hello":
 print(somechar)

Output:-

H
e
l
l
o

Output shows each character of string "Hello".

Each character is followed by a new line.

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```

1 a
2 b
3 c
4 d
5 e

for a in range(5):
    print(a)

def:
    0
    1
    2
    3
    4

Python program but not Pythonic.

def traverse(string):
    index = 0
    while index < len(string):
        letter = string[index]
        print(letter)
        index += 1

traverse('Monty Python')

def:
    M
    O
    N
    T
    Y
    P
    A
    T
    H
    O
    N

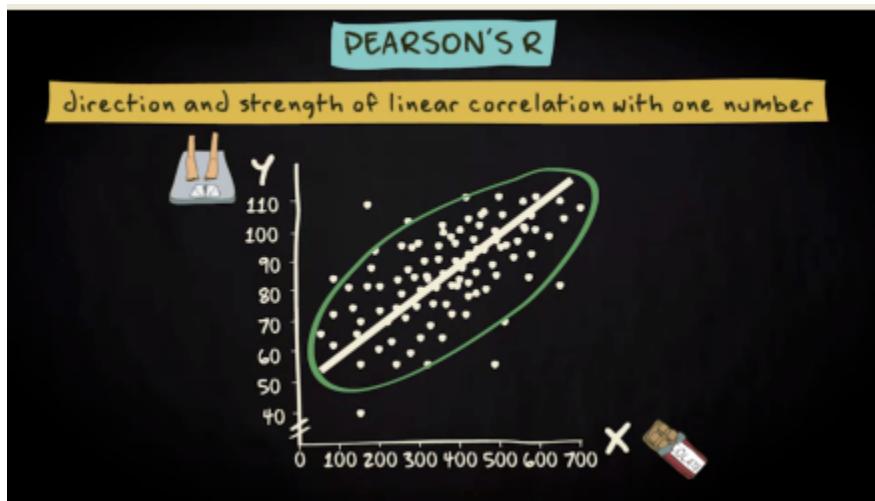
```

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|--------------------|----------------------------|---------------------|-----------------------------|
| Date: | 21 st July 2020 | Name: | Rajeshwari Gadagi |
| Course: | coursera | USN: | 4AL17EC076 |
| Topic: | Basic statistics | Semester & Section: | 6 th sem 'B' sec |
| Github Repository: | Rajeshwari-gadagi | | |

AFTERNOON SESSION DETAILS

Image of session



Basic Statistics > Week 2 > 2.01 Crosstabs and scatterplots

Correlation

Reading: Correlation
10 min.

Video: 2.01 Crosstabs and scatterplots
7 min.

Video: 2.02 Pearson's r
7 min.

Regression

Caveats & examples

Review

2.01 Crosstabs and scatterplots



Save Note Discuss Download

English Help Us Translate

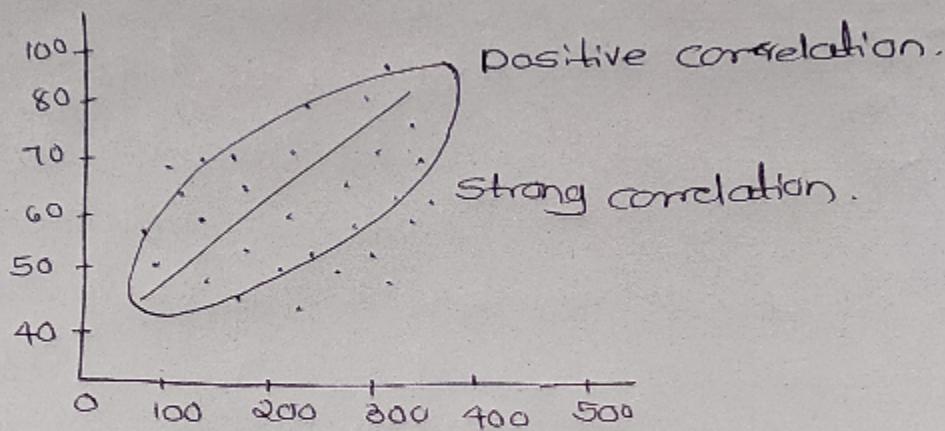
Notes

All notes

Click the "Save Note" button when you want to capture a screen. You can also highlight and save lines from the transcript below. Add your own notes to anything you've captured.

PEARSON'S R

Direction and strength of linear correlation with one number.



Compute Pearson's R :-

$$r = \frac{\sum z_x z_y}{n-1}$$

→ Check scatterplot before you calculate Pearson's

Compute Pearson's R :-

$$r = \frac{\sum Z_x Z_y}{n-1}$$

→ Check scatterplot before you calculate Pearson's

No linear
relation



No Pearson's r

Regression :-

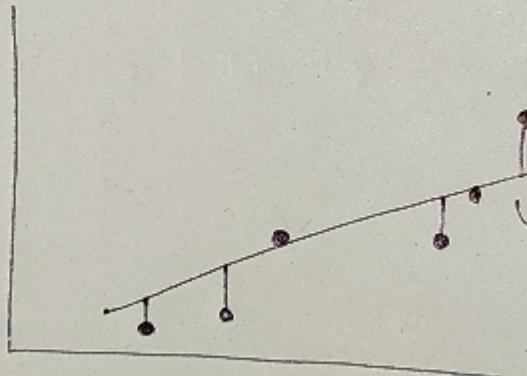
→ Regression analysis is one of the most frequently employed statistical methods.

→ linear correlation can be expressed in straight line.

Regression :-

- Regression analysis is one of the most frequently employed statistical methods.
- linear correlation can be expressed in straight line.

How to find a Regression line :-



ordinary least square
Regression.

↓
line with the smallest
sum of squared
residuals.