

Date : 27th May 2021

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:: Day - 3 ::

--Work Summary--

- Today it was the third day of our Internship.
- At the starting of the session Akash sir asked about our 2st day experience with his company internship. After that sir asked us questions and doubts of previous day task. Then we started with our topic programming language python.
- Taken by : Devanshi Prajapati

What we learnt ?

- Get input through user.
- Functions. (range ())
- Conditional Statements.
 - ❖ If statement
 - ❖ If...else Statement
 - ❖ If...elif...else Statement
 - ❖ Nested if statements
- Loops
 - ❖ While loop
 - ❖ For loop
 - ❖ Nested loop
- Break & Continue & Pass Statements

● Tasks

1. Calculate average of 5 numbers

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```
PS E:\MyProjects\Online Hall Management System\Internship-AkashTechnolabs\Tasks> cd .\task-3\  
PS E:\MyProjects\Online Hall Management System\Internship-AkashTechnolabs\Tasks\task-3> python .\01_average.py  
Enter the number-1: 30  
Enter the number-2: 20  
Enter the number-3: 5  
Enter the number-4: 7  
Enter the number-5: 9  
The average is 14.2  
PS E:\MyProjects\Online Hall Management System\Internship-AkashTechnolabs\Tasks\task-3> |
```

2. Check Whether Number is even or odd

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```
PS E:\MyProjects\Online Hall Management System\Internship-AkashTechnolabs\Tasks> cd .\task-3\  
PS E:\MyProjects\Online Hall Management System\Internship-AkashTechnolabs\Tasks\task-3> python .\02_odd_even.py  
Enter the number: 7  
7 is a odd.  
PS E:\MyProjects\Online Hall Management System\Internship-AkashTechnolabs\Tasks\task-3> python .\02_odd_even.py  
Enter the number: 6  
6 is a even.  
PS E:\MyProjects\Online Hall Management System\Internship-AkashTechnolabs\Tasks\task-3> |
```

3. Take a year and check whether it is leap year or not

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```
PS E:\MyProjects\Online Hall Management System\Internship-AkashTechnolabs\Tasks> cd .\task-3\  
PS E:\MyProjects\Online Hall Management System\Internship-AkashTechnolabs\Tasks\task-3> python .\03_leap_year.py  
Enter the year: 2100  
2100 year is not a leap year.  
PS E:\MyProjects\Online Hall Management System\Internship-AkashTechnolabs\Tasks\task-3> python .\03_leap_year.py  
Enter the year: 2016  
2016 year is a leap year.  
PS E:\MyProjects\Online Hall Management System\Internship-AkashTechnolabs\Tasks\task-3> |
```

4. Take a number and check whether it is zero, positive or negative

```
PS E:\MyProjects\Online Hall Management System\Internship-AkashTechnolabs\Tasks> cd .\task-3\  
PS E:\MyProjects\Online Hall Management System\Internship-AkashTechnolabs\Tasks\task-3> python .\04_+ve_-ve.py  
Enter the number: -3  
-3 is a negative.  
PS E:\MyProjects\Online Hall Management System\Internship-AkashTechnolabs\Tasks\task-3> python .\04_+ve_-ve.py  
Enter the number: 0  
0 is a zero.  
PS E:\MyProjects\Online Hall Management System\Internship-AkashTechnolabs\Tasks\task-3> python .\04_+ve_-ve.py  
Enter the number: 9  
9 is a positive.  
PS E:\MyProjects\Online Hall Management System\Internship-AkashTechnolabs\Tasks\task-3> |
```

5. Take 2 numbers and display greatest number. (Also check equal number condition)

```
Windows PowerShell  
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PS E:\MyProjects\Online Hall Management System\Internship-AkashTechnolabs\Tasks> cd .\task-3\  
PS E:\MyProjects\Online Hall Management System\Internship-AkashTechnolabs\Tasks\task-3> python .\05_greatest_num.py  
enter number-2:2  
2 and 2 are equal.  
PS E:\MyProjects\Online Hall Management System\Internship-AkashTechnolabs\Tasks\task-3> python .\05_greatest_num.py  
enter number-1:3  
enter number-2:4  
4 is greater than 3.  
PS E:\MyProjects\Online Hall Management System\Internship-AkashTechnolabs\Tasks\task-3> python .\05_greatest_num.py  
enter number-1:6  
enter number-2:1  
6 is greater than 1.  
PS E:\MyProjects\Online Hall Management System\Internship-AkashTechnolabs\Tasks\task-3> python .\05_greatest_num.py  
enter number-1:-10  
enter number-2:0  
0 is greater than -10.  
PS E:\MyProjects\Online Hall Management System\Internship-AkashTechnolabs\Tasks\task-3> |
```

6. Take a number and find factorial of that number

```
Windows PowerShell  
  
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PS E:\MyProjects\Online Hall Management System\Internship-AkashTechnolabs\Tasks> cd .\task-3\  
PS E:\MyProjects\Online Hall Management System\Internship-AkashTechnolabs\Tasks\task-3> python .\06_factorial.py  
Enetr the number: 10  
Factorial of 10 is a 3628800.  
PS E:\MyProjects\Online Hall Management System\Internship-AkashTechnolabs\Tasks\task-3> python .\06_factorial.py  
Enetr the number: 0  
Factorial of 0 is 1.  
PS E:\MyProjects\Online Hall Management System\Internship-AkashTechnolabs\Tasks\task-3> python .\06_factorial.py  
Enetr the number: -19  
Factorial doesn't exists fro negative number.  
PS E:\MyProjects\Online Hall Management System\Internship-AkashTechnolabs\Tasks\task-3> |
```

7. write a program to swap 2 numbers using third variable

```
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PS E:\MyProjects\Online Hall Management System\Internship-AkashTechnolabs\Tasks> cd .\task-3\
PS E:\MyProjects\Online Hall Management System\Internship-AkashTechnolabs\Tasks\task-3> python .\07_swap_num.py
enter number-1:10
enter number-2:20
number1 is 20
number2 is 10
PS E:\MyProjects\Online Hall Management System\Internship-AkashTechnolabs\Tasks\task-3> █
```

8. Take 2 numbers and find smallest number

```
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PS E:\MyProjects\Online Hall Management System\Internship-AkashTechnolabs\Tasks> cd .\task-3\
PS E:\MyProjects\Online Hall Management System\Internship-AkashTechnolabs\Tasks\task-3> python .\08_smallest_num.py
enter number-1:10
enter number-2:100
10 is smaller than 100.
PS E:\MyProjects\Online Hall Management System\Internship-AkashTechnolabs\Tasks\task-3> python .\08_smallest_num.py
enter number-1:200
enter number-2:6
6 is smaller than 200.
PS E:\MyProjects\Online Hall Management System\Internship-AkashTechnolabs\Tasks\task-3> █
```

9. Take a number check if a number is less than 100 or not. If it is less than 100 then check if it is odd or even

```
Windows PowerShell

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PS E:\MyProjects\Online Hall Management System\Internship-AkashTechnolabs\Tasks> cd .\task-3\
PS E:\MyProjects\Online Hall Management System\Internship-AkashTechnolabs\Tasks\task-3> python .\09_less_100.py
Enetr the number: 300
Number is greater than 100.
PS E:\MyProjects\Online Hall Management System\Internship-AkashTechnolabs\Tasks\task-3> python .\09_less_100.py
Enetr the number: 100
Number is a 100.
PS E:\MyProjects\Online Hall Management System\Internship-AkashTechnolabs\Tasks\task-3> python .\09_less_100.py
Enetr the number: 5
Number is less than 100 and odd.
PS E:\MyProjects\Online Hall Management System\Internship-AkashTechnolabs\Tasks\task-3> █
```


10. Take a number to print the square of a number if it is less than 10

```
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PS E:\MyProjects\Online Hall Management System\Internship-AkashTechnolabs\Tasks> cd .\task-3\
PS E:\MyProjects\Online Hall Management System\Internship-AkashTechnolabs\Tasks\task-3> python .\10_square_number.py
Enter the number: 11
Number is not less than 10.
PS E:\MyProjects\Online Hall Management System\Internship-AkashTechnolabs\Tasks\task-3> python .\10_square_number.py
Enter the number: 9
Square of 9 is a 81
PS E:\MyProjects\Online Hall Management System\Internship-AkashTechnolabs\Tasks\task-3> █
```

11. Take a number and check whether it is zero, positive or negative using nested IF...ELSE statement

```
Windows PowerShell

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PS E:\MyProjects\Online Hall Management System\Internship-AkashTechnolabs\Tasks> cd .\task-3\
PS E:\MyProjects\Online Hall Management System\Internship-AkashTechnolabs\Tasks\task-3> python .\11_+ve_-ve_nested.py
Enter the number: 10
10 is Positive.
PS E:\MyProjects\Online Hall Management System\Internship-AkashTechnolabs\Tasks\task-3> python .\11_+ve_-ve_nested.py
Enter the number: 0
0 is Zero.
PS E:\MyProjects\Online Hall Management System\Internship-AkashTechnolabs\Tasks\task-3> python .\11_+ve_-ve_nested.py
Enter the number: -5
-5 is Negative.
PS E:\MyProjects\Online Hall Management System\Internship-AkashTechnolabs\Tasks\task-3> █
```

12. Take 3 numbers and find greatest number using nested IF....ELSE statement

```
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PS E:\MyProjects\Online Hall Management System\Internship-AkashTechnolabs\Tasks> cd .\task-3\
PS E:\MyProjects\Online Hall Management System\Internship-AkashTechnolabs\Tasks\task-3> python .\12_greatest_of_3.py
Enter the number1: 12
Enter the number2: 8
Enter the number3: 90
90 is a greatest number.
PS E:\MyProjects\Online Hall Management System\Internship-AkashTechnolabs\Tasks\task-3> python .\12_greatest_of_3.py
Enter the number1: 10
Enter the number2: 9
Enter the number3: 8
10 is a greatest number.
PS E:\MyProjects\Online Hall Management System\Internship-AkashTechnolabs\Tasks\task-3> python .\12_greatest_of_3.py
Enter the number1: 1
Enter the number2: 50
Enter the number3: 9
50 is a greatest number.
PS E:\MyProjects\Online Hall Management System\Internship-AkashTechnolabs\Tasks\task-3> █
```

13. Take 3 numbers and find smallest number using logical operator

```
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PS E:\MyProjects\Online Hall Management System\Internship-AkashTechnolabs\Tasks> cd .\task-3\
PS E:\MyProjects\Online Hall Management System\Internship-AkashTechnolabs\Tasks\task-3> python .\13_smallest_logic.py
Enter the number1: 2
Enter the number2: 3
Enter the number3: 4
2 is a smallest number.
PS E:\MyProjects\Online Hall Management System\Internship-AkashTechnolabs\Tasks\task-3> python .\13_smallest_logic.py
Enter the number1: 9
Enter the number2: 1
Enter the number3: 10
1 is a smallest number.
PS E:\MyProjects\Online Hall Management System\Internship-AkashTechnolabs\Tasks\task-3> python .\13_smallest_logic.py
Enter the number1: 30
Enter the number2: 40
Enter the number3: 25
25 is a smallest number.
PS E:\MyProjects\Online Hall Management System\Internship-AkashTechnolabs\Tasks\task-3> |
```

14. Write a program to swap 2 numbers without taking third variable

```
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PS E:\MyProjects\Online Hall Management System\Internship-AkashTechnolabs\Tasks> cd .\task-3\
PS E:\MyProjects\Online Hall Management System\Internship-AkashTechnolabs\Tasks\task-3> python .\14_swap_without_3rd.py
enter number-1:30
enter number-2:12
number1 is 12
number2 is 30
PS E:\MyProjects\Online Hall Management System\Internship-AkashTechnolabs\Tasks\task-3> |
```

15. Take starting number and ending number from the user and print following series(30 27 24 21 18 15 12 9 6 3 0)

```
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PS E:\MyProjects\Online Hall Management System\Internship-AkashTechnolabs\Tasks> cd .\task-3\
PS E:\MyProjects\Online Hall Management System\Internship-AkashTechnolabs\Tasks\task-3> python .\15_start-end.py
Enter the starting number: 20
Enter the ending number: 10
20
17
14
11
PS E:\MyProjects\Online Hall Management System\Internship-AkashTechnolabs\Tasks\task-3> |
```