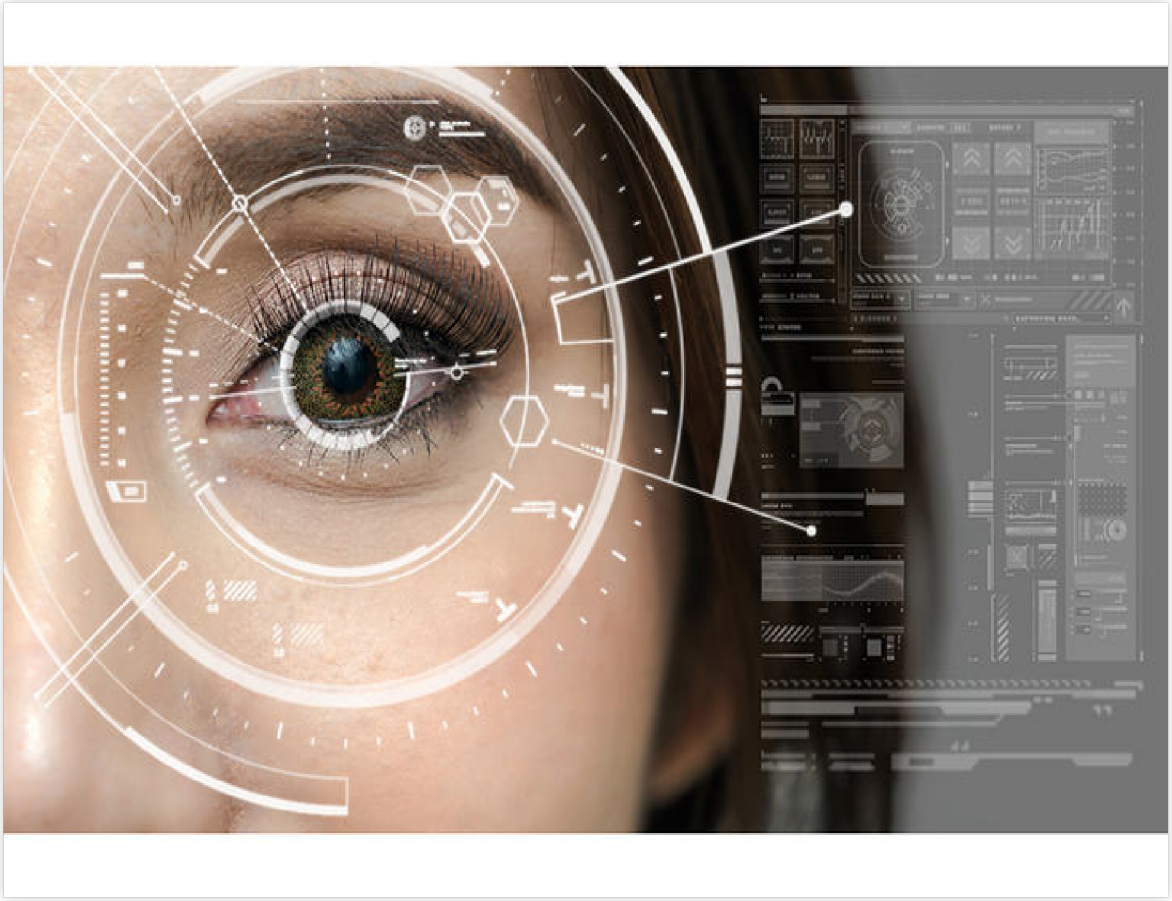
1.28 Pass activity



Welcome to week-1 quiz and problem solving activity.

Quiz: *Attempt the quiz as many times as you need to score more than 85% and then take a screen-shot of your score and add it in your report that you are going to submit as a part of pass task in OnTrack.*

SIT307

We can find the quiz link by clicking on this **SIT307-Week 1-Quiz**

SIT720

We can find the quiz link by clicking on this **SIT720-Week 1-Quiz**

Problem solving activity: Solve the following set of problems using Python and submit the code file with extension .ipynb in OnTrack as part of your pass activity.

SIT307 and SIT720

1. Define a string variable with your name. Print characters of odd and even position of your name.

2. Create three variables named 'Student name', 'Course name', and 'EmailAddress'. Add 5 random values in these variables, where added values are not replaceable and print them.

3. Create a dictionary variable with three keys, which are named same as the three variables created in the previous problem. Insert the previously created three variables values in the dictionary variable and print it.

4. Define a string variable 'energy' and assign value either 'Fossil' or 'Renewable'. Print "Natural gas" if the value of energy

variable is 'Fossil' otherwise print "solar power". What will your program print if energy='Biomass '?

5. Print all prime numbers between 0 and 100 separated by line.

6. Is it possible to break a loop before executing for the defined number of iterations? If yes, provide an example using While loop structure. Otherwise, explain your answer (why and how).

7. Create functions named 'Addition', 'Multiplication', 'Division' and 'Subtraction'. These functions takes two input parameters say (x, y) and return (x+y),(x*y), (x/y) and (x-y). Call the function with (4,7) arguments and print the outputs

8. Create and display a 8x8 Identity matrix and multiply it with a 8x4 Random matrix.

9. Create a 8x9 matrix, initialise with random values and print it. Now, transpose the matrix and print it. How the transposed matrix is different from original matrix?

Activity Details

You have viewed this topic

Last Visited 23 July, 2023 4:52 PM