



STEPSTONE-2024

STANDARD OPERATING PROCEDURE

EVENT NAME : BYTE FLOW INTEGRATION

DEPARTMENT NAME: EEE

EVENT TYPE : Technical event

EVENT COORDINATORS:

- 1) P. Sridevi
- 2) P. Nirmala
- 3) S. Sravanthi

EVENT DESCRIPTION:

The event encompasses the fusion of coding and fundamental electrical knowledge. Initially, Participants are provided with ten basic code snippets, each containing small syntax errors. Their task is to identify and correct these errors. Upon running each code, they obtain a numerical output. This process is repeated for all ten codes, resulting in a sequence of ten numbers. Participants record these numbers in order, then participants receive a components table containing serial numbers in one column and the names of basic electrical components (e.g., resistance, inductance) in another column. Each serial number corresponds to a specific component provided in the components table, participants proceed to design a circuit by arranging the components based on their output order. For instance, if the first code yields an output of 8, participants locate the component corresponding to 8 in the components table. They repeat this process for all ten codes. The designed circuit must be simulated using PSPICE software, producing a graph that represents the behaviour of the specific circuit created by the participants.

NOTE:

Participants may encounter duplicate numbers in their output sequence. The output order will vary between teams competing side by side. The provided codes will be written in the Python programming language.

TEAM RANGE:

We are expecting for 30 teams

And each team contains 3 members

RULES AND REGULATIONS:

- Participants must manage their time effectively to complete all tasks within the specified limits.



- Participants will receive ten code snippets with small syntax errors.
- The task is to identify and correct these errors within a specified time frame.
- participants should not modify the logic or functionality of the code.
- After correcting each code, participants will run the code to obtain a numerical output.
- Participants must record these ten numerical outputs in the order they are obtained.
- A components table will be provided, containing serial numbers and corresponding electrical components.
- Participants will use this table to associate numerical outputs with specific electrical components for circuit design
- Participants must use PSPICE software for simulating the designed circuit.
- The simulation should produce a graph representing the behaviour of the circuit
- Mobile phones should not be carried with the participants
- Participants should not use Internet

TEAM RANGE:

- We are expecting for 30 teams
- And each team contains 3 members

PLAN OF ACTION:

It is dayshift event happens for three hours

Date: [To Be Announced]

Time: [To Be Announced],

Venue: [To Be Announced]

JUDGING CRITERIA:

- Code Correction Accuracy
- Numerical Output Accuracy
- Component Identification
- Simulation Accuracy
- Circuit design



EVENT HIGHLIGHTS:

The event provides a rare opportunity for participants to bridge the gap between coding and electrical engineering. It encourages the integration of skills from two distinct fields, fostering a holistic

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Problem-Solving Skills: Participants engage in the identification and correction of syntax errors in code snippets, honing their problem-solving abilities. This aspect challenges them to think critically and troubleshoot effectively.

Circuit Design Mastery: The process of translating numerical outputs into a designed circuit improves participants' circuit design skills. This involves understanding the relationship between code output and electrical components.

Simulation Experience: Simulating the designed circuit using PSPICE software offers a virtual environment for testing and validating the circuit's behaviour. Participants gain experience in using simulation tools commonly employed in the industry

Prizes and Recognition: Get Cash prizes and recognizable certificates by competing your coding and electrical knowledge.

- Winner will be awarded with a cash prize of 2000/-
- Runner will be awarded with a cash prize of 1000/-

REGISTRATION:

Secure your spot in this Byte flow integration! Register online at [Registration Link] and showcase your coding and circuit designing skills. Limited slots available, so sign up early to ensure your participation.

Join us in this fusion event where you can actively apply your coding expertise to design an electrical circuit and witness its practical application firsthand.