P.S.R. ENGINEERING COLLEGE

(An Autonomous Institution, Affiliated to Anna University, Chennai)
Approved by AICTE, New Delhi & Accredited by National Board of Accreditation (NBA)
Accredited by NAAC, Recognized under 12(B) of the UGC Act, 1956
Sevalpatti (P.O), Sivakasi - 626140, Tamilnadu.

DEPARTMENT OF ECE

INNOVATIVE PRACTICES

Programme:	B.E.	Branch	Electronics and Communication Engineering
Academic Year:	2022-2023	Year/Semester	IV/VII
Course Code:	191EC71	Course Name	Robotics and Artificial Intelligence
Date of activity:	20.07.2022	Duration	40 mins
Course Tutor:	Dr.R.Meena Prakash, Associate Professor/ECE		

Unit / Topic	**Unit I / Robot Classifications**
Course Outcome	**CO1: Classify the different types of Robots. (UN)**
Activity Chosen	**Visualization**
Activity Implementation	https://www.youtube.com/watch?v=Jkv9I1ihAkg The faculty plays the video and the students watch and understand the concept
Type of Activity	Individual/Group/Both

CO – PO -PSO Mapping

CO	PO1	PO2	PO8	PO10	PSO2	PSO4
CO1	2	1	1	1	1	2

Images / Screen shot of the practice:

R Meena Prakash

Course Tutor **Programme Co-ordinator** **HOD/ECE**

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INNOVATIVE PRACTICES

Programme:	B.E.	Branch	Electronics and Communication Engineering
Academic Year:	2022-2023	Year/Semester	IV/VII
Course Code:	191EC71	Course Name	Robotics and Artificial Intelligence
Date of activity:	29.082022	Duration	40 mins
Course Tutor:	Dr.R.Meena Prakash, Associate Professor/ECE		

Unit / Topic	**Unit II / Uninformed Search Techniques**
Course Outcome	**CO3: Apply AI methods to solve various problems. (AP)**
Activity Chosen	**Simulation based learning**
Activity Implementation	The faculty runs Jupyter notebook on Google Colab and displays on Projector. The students watch & understand the uniformed search techniques including Depth First Search and Breadth First Search Algorithms
Type of Activity	~~Individual~~/Group/Both

CO – PO -PSO Mapping

CO	PO1	PO2	PO3	PO5	PO9	PSO4
CO2	3	2	1	1	1	2

Images / Screen shot of the practice:

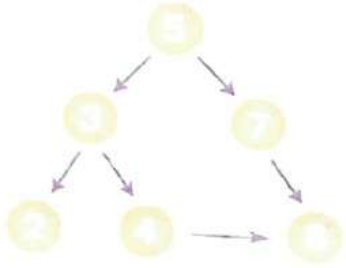
```
graph = {
  '5' : ['3','7'],
  '3' : ['2', '4'],
  '7' : ['8'],
  '2' : [],
  '4' : ['8'],
  '8' : []
}

visited = [] # List for visited nodes.
queue = []     #Initialize a queue

def bfs(visited, graph, node): #function for BFS
  visited.append(node)
  queue.append(node)

  while queue:          # Creating loop to visit each node
    m = queue.pop(0)
    print (m, end = " ")

    for neighbour in graph[m]:
```



R.Meena Prakash
Course Tutor

Programme Co-ordinator

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Programme:	B.E.	Branch	Electronics and Communication Engineering
Academic Year:	2022-2023	Year/Semester	IV/VII
Course Code:	191EC71	Course Name	Robotics and Artificial Intelligence
Date of activity:	26.09.2022	Duration	40 mins
Course Tutor:	Dr.R.Meena Prakash, Associate Professor/ECE		

Unit / Topic	**Unit III / Game Playing**
Course Outcome	**CO4: Apply the State-Space Search problem-solving paradigm for Game playing (AP)**
Activity Chosen	**Game based learning**
Activity Implementation	The faculty teaches the rules involved in the two-player Nim game. Pair of students exhibit the game to the other students and the students understand the concept and solve problems.
Type of Activity	~~Individual~~/~~Group~~/Both

CO – PO -PSO Mapping

CO	PO1	PO2	PO3	PSO4
CO4	3	2	1	2

Images / Screen shot of the practice:

R. Meena Bank
Course Tutor

Programme Co-ordinator

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Programme:	B.E.	Branch	Electronics and Communication Engineering
Academic Year:	2022-2023	Year/Semester	IV/VII
Course Code:	191EC71	Course Name	Robotics and Artificial Intelligence
Date of activity:	17.10.22	Duration	40 mins
Course Tutor:	Dr.R.Meena Prakash, Associate Professor/ECE		

Unit / Topic	**Unit IV / Propositional Logic**
Course Outcome	**CO5: Develop knowledge base sentences using propositional logic and first order logic. (AP)**
Activity Chosen	**Think Pair Share**
Activity Implementation	The faculty teaches the concept of propositional logic and gives an example. Students pair among themselves, discuss and solve problems based on Propositional Logic.
Type of Activity	~~Individual~~/~~Group~~/Both

CO – PO -PSO Mapping

CO	PO1	PO2	PO3	PO5	PO9	PSO4
CO4	3	2	1	1	1	2

Images / Screen shot of the practice:

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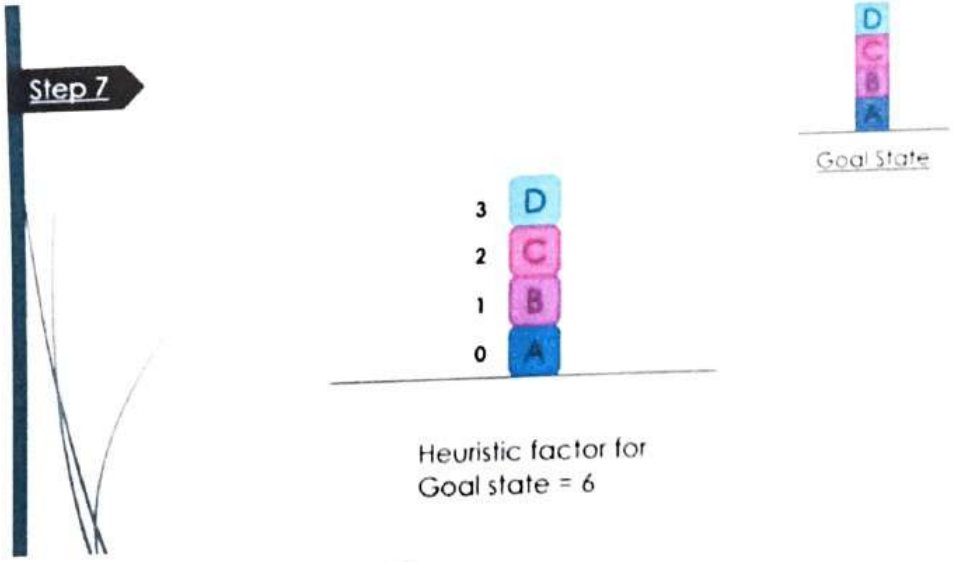
Programme:	B.E.	Branch	Electronics and Communication Engineering
Academic Year:	2022-2023	Year/Semester	IV/VII
Course Code:	191EC71	Course Name	Robotics and Artificial Intelligence
Date of activity:	28.10.2022	Duration	40 mins
Course Tutor:	Dr.R.Meena Prakash, Associate Professor/ECE		

Unit / Topic	**Unit V / Block World Problem**
Course Outcome	**CO6: Explain the different planning strategies of AI. (UN)**
Activity Chosen	**Visualization**
Activity Implementation	https://www.youtube.com/watch?v=B40T2ScHIIA The faculty plays the video and the students watch and understand the concept
Type of Activity	~~Individual~~/Group/Both

CO – PO -PSO Mapping

CO	PO1	PO2	PSO4
CO2	2	1	2

Images / Screen shot of the practice:



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