



HONORCODE ELT23-4-4774

## Siddhika Shukla

has successfully completed the course spanning over 12 modules. The training helps people in understanding energy, its generation, consumption , wastage, carbon footprint , impact on the environment, means to avoid and minimize energy usage, alternative energy solutions , ways to become carbon neutral, misconceptions on solar energy, and approach to adopt solar energy solutions . This training is a part of the "ENERGYLITERACYTRAINING" of the Energy Swaraj Foundation.

19-04-2023

Organization



Funding Partners

























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# CERTIFICATE

OF PARTICIPATION

This certificate is awarded to

# Siddhika shukla

For participating in the event “ROADMAP TO WEB DEVELOPMENT” by  
IEEE GTBIT SB CS Chapter held on 10<sup>TH</sup> January 2022.

MR. MUKESH SAHU

BRANCH COUNSELLOR, IEEE GTBIT





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# CERTIFICATE

OF PARTICIPATION

This certificate is awarded to

## Siddhika shukla

For participating in the event “BASICS OF PYTHON” by IEEE GTBIT SB CS Chapter held on 26<sup>TH</sup> December 2021.

MR. MUKESH SAHU

BRANCH COUNSELLOR, IEEE GTBIT



```

PS C:\college programs> cd "c:\college programs\" ; if ($?) { gcc p1.c -o p1 } ; if ($?) { .\p1 }
P  BT  WT  TAT
1 10  0   10
2 5   10  15
3 8   15  23
Average waiting time = 8.333333
Average turn around time = 16.000000
PS C:\college programs>

```

```

PS C:\college programs> cd "c:\college programs\" ; if ($?) { gcc p1.c -o p1 } ; if ($?) { .\p1 }
Enter number of process: 5
Enter Burst Time:
P1: 01
P2: 02
P3: 03
P4: 04
P5: 05
P      BT      WT      TAT
P1     1       0       1
P2     2       1       3
P3     3       3       6
P4     4       6      10
P5     5      10      15
Average Waiting Time= 4.000000
Average Turnaround Time= 7.000000
PS C:\college programs>

```

```

PS C:\college programs> cd "c:\college programs\" ; if ($?) { gcc p1.c -o p1 } ; if ($?) { .\p1 }
Enter Number of Processes: 5
Enter Burst Time and Priority Value for Process 1: 1 3
Enter Burst Time and Priority Value for Process 2: 2 2
Enter Burst Time and Priority Value for Process 3: 3 1
Enter Burst Time and Priority Value for Process 4: 4 5
Enter Burst Time and Priority Value for Process 5: 5 4
Order of process Execution is
P4 is executed from 0 to 4
P5 is executed from 4 to 9
P1 is executed from 9 to 10
P2 is executed from 10 to 12
P3 is executed from 12 to 15

Process Id    Burst Time   Wait Time   TurnAround Time
P4            4             0           4
P5            5             4           9
P1            1             9          10
P2            2            10          12
P3            3            12          15
PS C:\college programs>

```

```

PS C:\college programs> cd "c:\college programs\" ; if ($?) { gcc p1.c -o p1 } ; if ($?) { .\p1 }

Total number of process in the system: 2

Enter the Arrival and Burst time of the Process[1]
Arrival time is: 1

Burst time is: 8

Enter the Arrival and Burst time of the Process[2]
Arrival time is: 2

Burst time is: 4
Enter the Time Quantum for the process: 3

Process No          Burst Time          TAT          Waiting Time
Process No[2]        4                  8           4
Process No[1]        8                  11          3
Average Turn Around Time: 9.500000
Average Waiting Time: 3.500000

```

```

PS C:\college programs> cd "c:\college programs\" ; if ($?) { gcc p1.c -o p1 } ; if ($?) { .\p1 }

Enter no of pages:10
Enter the reference string:7 8 9 3 2 4 7 4 6 1
Enter no of frames:3

7
7     8
7     8     9
3     8     9
3     2     9
3     2     4
7     2     4
7     6     4
1     6     4

The no of page faults is 9
PS C:\college programs>

```

Incoming	t	Frame 1	t	Frame 2	t	Frame 3	
4		4		-		-	
1		4		1		-	
2		4		1		2	
4		4		1		2	
5		5		1		2	
Total Page Faults: 4							

```

PS C:\college programs> cd "c:\college programs\" ; if ($?) { gcc p1.c -o p1 } ; if ($?) { .\p1 }

Enter number of frames: 3
Enter number of pages: 10
Enter page reference string: 7 8 9 3 2 1 6 5 4 9

7      -1      -1
7      8      -1
7      8      9
3      8      9
2      8      9
1      8      9
6      8      9
5      8      9
4      8      9
4      8      9

Total Page Faults = 9
PS C:\college programs>

```

```
Memory Management Scheme - Worst Fit
Enter the number of blocks:3
Enter the number of files:3

Enter the size of the blocks:-
Block 1:5
Block 2:2
Block 3:7
Enter the size of the files :-
File 1:1
File 2:4
File 3:5

File_no:      File_size :      Block_no:      Block_size:      Fragement
1            1              3                7                  6
2            4              1                5                  1
3            5              0                8                  0
```

```
Memory Management Scheme - First Fit
Enter the number of blocks:3
Enter the number of files:2

Enter the size of the blocks:-
Block 1:5
Block 2:2
Block 3:7
Enter the size of the files :-
File 1:1
File 2:4

File_no:      File_size :      Block_no:      Block_size:      Fragement
1            1              1                5                  4
2            4              3                7                  3
PS C:\college programs>
```

```
Enter the number of blocks:3
Enter the number of files:2

Enter the size of the blocks:-
Block 1:5
Block 2:7
Block 3:2
Enter the size of the files :-
File 1:4
File 2:3

File No File Size      Block No      Block Size      Fragment
1          4             1              5                  1
2          3             2              7                  4
PS C:\college programs>
```

```
1 reader is inside
1 Reader is leaving
Writer is trying to enter
Writer has entered
Writer is leaving
1 reader is inside
1 Reader is leaving
Writer is trying to enter
Writer has entered
Writer is leaving
1 reader is inside
1 Reader is leaving
Writer is trying to enter
Writer has entered
Writer is leaving
1 reader is inside
1 Reader is leaving
Writer is trying to enter
Writer has entered
Writer is leaving

...Program finished with exit code 0
Press ENTER to exit console. █
```

```
Enter the number of Producers:2
Enter the number of Consumers:2
Enter buffer capacity:2
Successfully created producer 1
Producer 1 produced 29
Successfully created producer 2
Producer 2 produced 11
Successfully created consumer 1
Buffer:29 11
Consumer 3 consumed 11
Current buffer len: 1
Buffer:29
Consumer 2 consumed 29
Current buffer len: 0
Successfully created consumer 2
Producer 1 produced 3
Buffer:3
Consumer 2 consumed 3
Current buffer len: 0
Producer 2 produced 31
Producer 1 produced 27
Producer 1 produced 7
Buffer:31 27
```

```
Enter the number of process and resources
5 3
enter allocation of resource of all process 5x3 matrix
1 2 3
4 5 6
0 6 7
0 8 9
9 5 4
enter the max resource process required 5x3 matrix
0 1 0
1 2 3
2 3 4
3 4 5
4 5 6
enter the available resource 3 4 2

need resources matrix are
-1      -1      -3
-3      -3      -3
2       -3      -3
3       -4      -4
-5      0       2

available resource after completion
17      30      31
safe sequence are
p0      p1      p2      p3      p4
```

```
Enter the directory name:siddhika
Enter the number of files:3
Enter file name to be created:sid
Do you want to enter another file(yes - 1 or no - 0):1
Enter file name to be created:shukla
Do you want to enter another file(yes - 1 or no - 0):1
Enter file name to be created:ss
Do you want to enter another file(yes - 1 or no - 0):1
Enter file name to be created:sk
Do you want to enter another file(yes - 1 or no - 0):0
Directory name is:siddhika
Files names are:
sid
shukla
ss
sk
PS C:\college programs> █
```

```
1. Create Directory      2. Create File   3. Delete File
4. Search File         5. Display       6. Exit
Enter your choice -- 1
```

```
Enter name of directory -- siddhika
Directory created
```

```
1. Create Directory      2. Create File   3. Delete File
4. Search File         5. Display       6. Exit
Enter your choice -- 2
```

```
Enter name of the directory -- siddhika
Enter name of the file -- sid
File created
```

```
1. Create Directory      2. Create File   3. Delete File
4. Search File         5. Display       6. Exit
Enter your choice -- 5
```

```
Directory      Files
siddhika      sid
```

```
1. Create Directory      2. Create File   3. Delete File
4. Search File         5. Display       6. Exit
Enter your choice -- 6
PS C:\college programs> █
```

```
PS C:\college programs> cd "c:\college programs\" ; if ($?) { gcc hierarchical.c -o hierarchical } ; if (?) { .\hierarchical }
Enter number of users: 1
Enter name: siddhika
Enter dir(1) or file(0): sid
```

```
Hierarchical
█
```