

**AMITY SCHOOL OF ENGINEERING AND TECHNOLOGY,  
MUMBAI**



**MINOR PROJECT REPORT**

**CSE2611 MACHINE LEARNING**

*SUBMITTED TO*

**Dr. DEEPA PARASAR**

**FACULTY GUIDE**

*SUBMITTED BY*

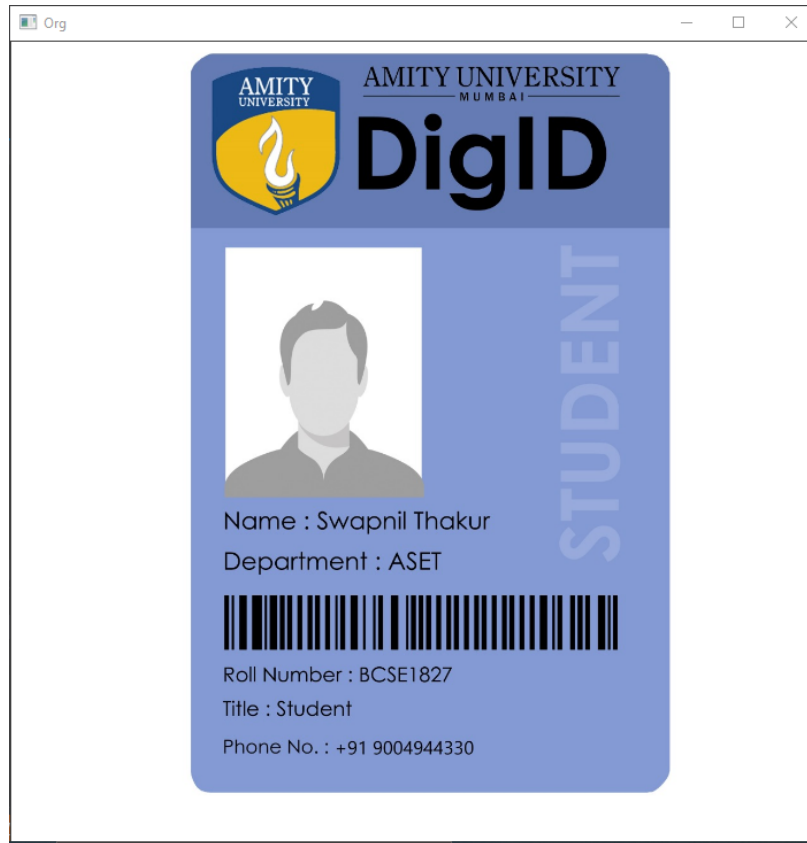
**SWAPNIL THAKUR (BCSE1827)**

**L.P.SHREYA (BCSE1834)**

**BTECH CSE 2018-22**

## SCREENSHOTS OF THE PROJECT:

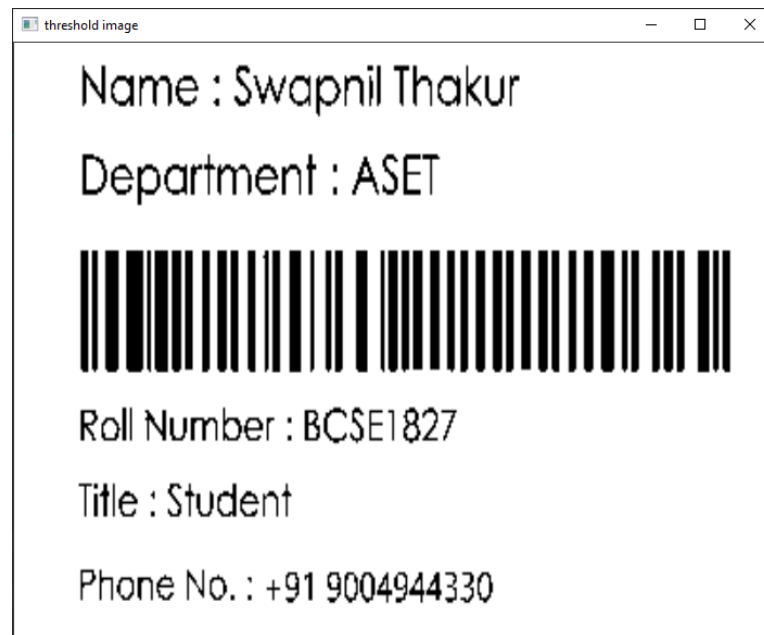
- Capturing image , storing and scanning it



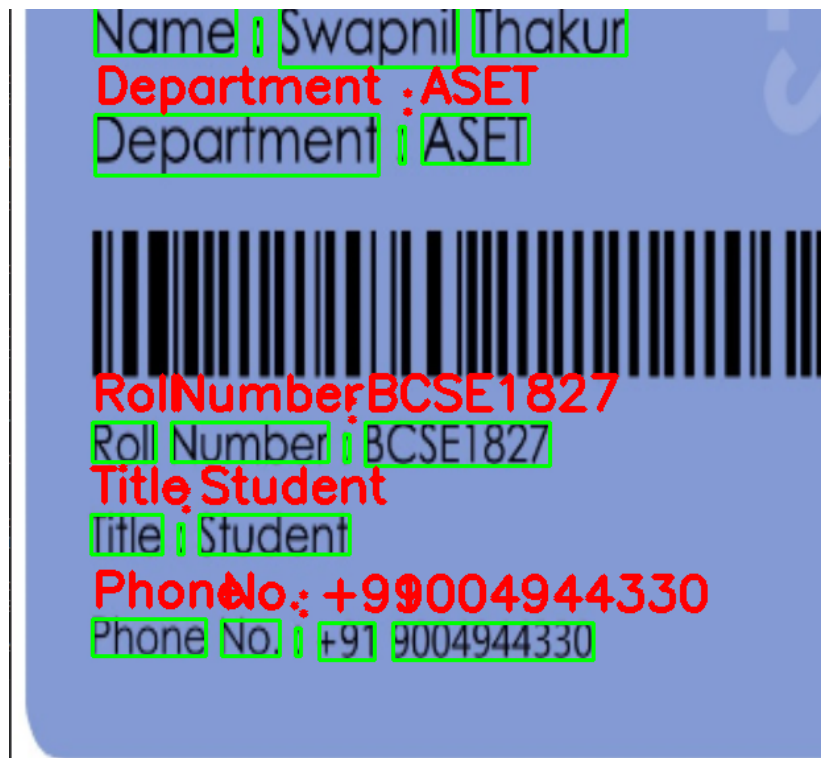
- Cropping the image



- Converting into grey scale



- Text recognition and extraction



- Checking with the predefined data and decide whether to permit or not the person
- Entering the system time to the record file

```
C:\Users\smart\AppData\Local\Programs\Python\Python39\python.exe

Confidence: 95
Text: +91

Confidence: 96
Text: 9004944330

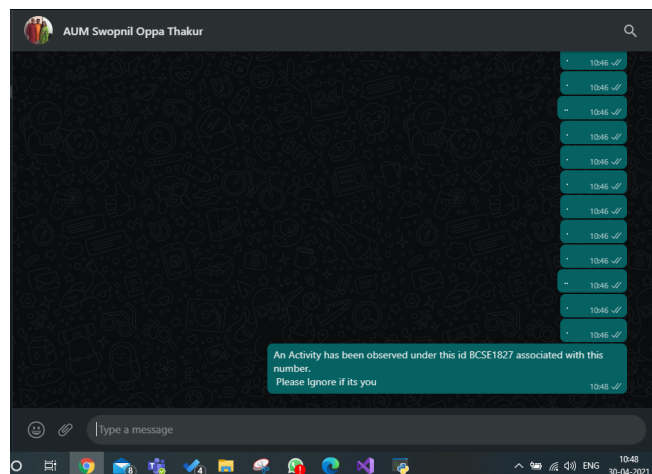
+919004944330
{'Name': 'Swapnil', 'Department': 'ASET', 'Roll': 'BCSE1827', 'Title': 'Student', 'No.': '+919004944330'}
['04/30/2021, 10:46:54', 'Swapnil', 'ASET', 'BCSE1827', 'Student', '+919004944330']
Swapnil Thakur
{'Name': 'Swapnil Thakur ', 'Department': 'ASET', 'Roll': 'BCSE1827', 'Title': 'Student', 'No.': '+919004944330'}
['04/30/2021, 10:46:54', 'Swapnil Thakur ', 'ASET', 'BCSE1827', 'Student', '+919004944330']

      DateTime      Name      ...      Title      No
0      DateTime      Name      ...      Title      No
1  04/30/2021, 10:46:24  Swapnil Thakur  ...  Student  +919004944330

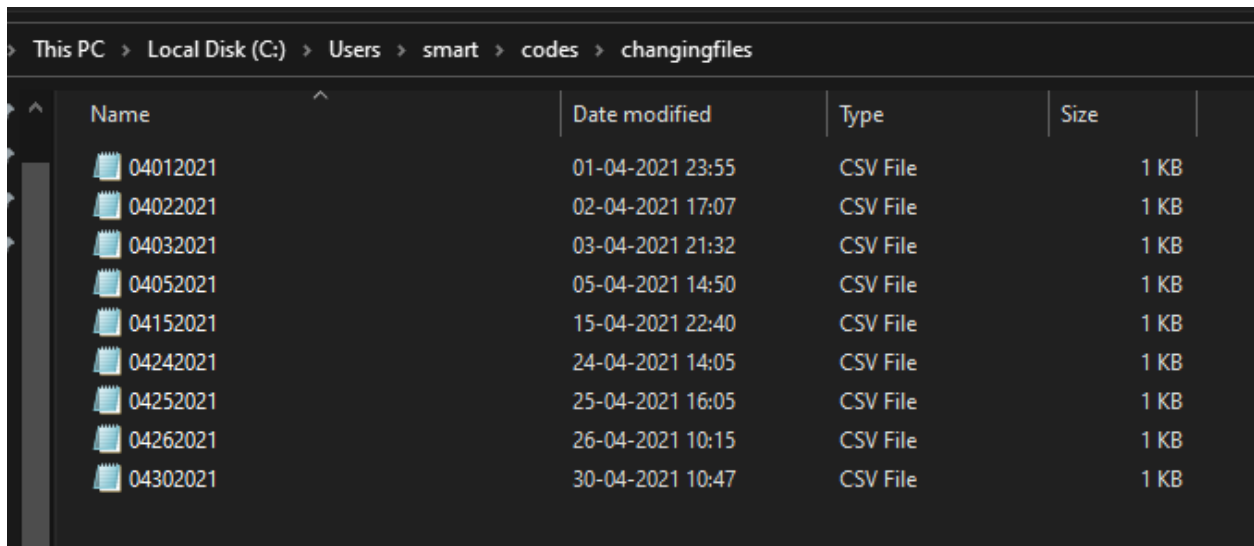
[2 rows x 6 columns]
BCSE1827
1
<class 'str'>
      DateTime      ...      No
0      DateTime      ...      No
1  04/30/2021, 10:46:24  04/30/2021, 10:46:54  ...  +919004944330

[2 rows x 6 columns]
['04/30/2021, 10:46:54', 'Swapnil Thakur ', 'ASET', 'BCSE1827', 'Student', '+919004944330']
30 permitted
In 31 seconds web.whatsapp.com will open and after 20 seconds message will be delivered
```

- A message is sent on the authorized contact number whenever the ID card is scanned.



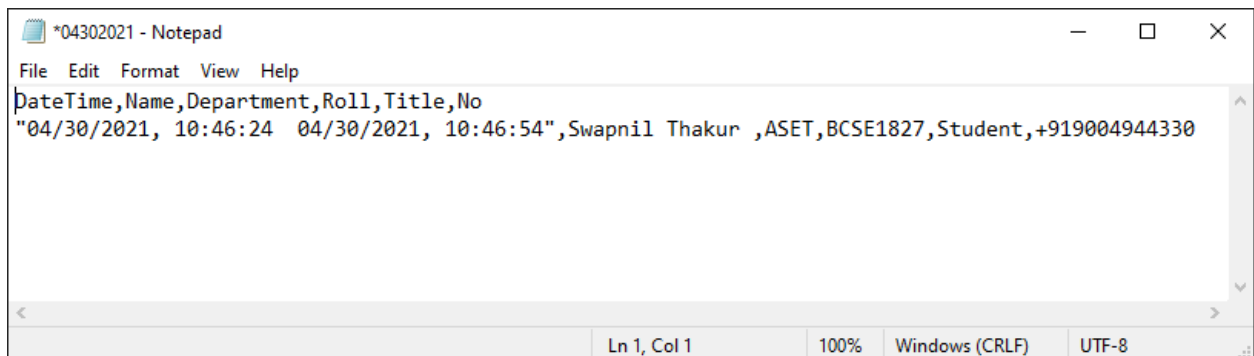
- To Implement date-wise saving of records.



The screenshot shows a Windows File Explorer window with the address bar set to 'This PC > Local Disk (C:) > Users > smart > codes > changingfiles'. The main pane displays a list of CSV files, each 1 KB in size, with names formatted as YYYYMMDD. The files are sorted by date modified.

Name	Date modified	Type	Size
04012021	01-04-2021 23:55	CSV File	1 KB
04022021	02-04-2021 17:07	CSV File	1 KB
04032021	03-04-2021 21:32	CSV File	1 KB
04052021	05-04-2021 14:50	CSV File	1 KB
04152021	15-04-2021 22:40	CSV File	1 KB
04242021	24-04-2021 14:05	CSV File	1 KB
04252021	25-04-2021 16:05	CSV File	1 KB
04262021	26-04-2021 10:15	CSV File	1 KB
04302021	30-04-2021 10:47	CSV File	1 KB

- To maintain multiple entries of an individual in same record



The screenshot shows a Notepad window titled '\*04302021 - Notepad'. The menu bar includes File, Edit, Format, View, and Help. The text content is as follows:

```
DateTime,Name,Department,Roll,Title,No
"04/30/2021, 10:46:24 04/30/2021, 10:46:54",Swapnil Thakur ,ASET,BCSE1827,Student,+919004944330
```

The status bar at the bottom indicates 'Ln 1, Col 1', '100%', 'Windows (CRLF)', and 'UTF-8'.

- To Classify individuals on the basis of their regularity

generatingfile2 ☆ ☰ ☁

File Edit View Insert Format Data Tools Add-ons Help [Last edit was seconds ago](#)

100% \$ % .0 .00 123 Arial 10 B I U A

M:M - | fx |

	A	B	C	D	E	F	G
1	Name	Roll	Sick leave	On Duty Leave	Attended days	Special Case	
2	Mr ABHISHEK KUMAR LALWANI	BCSE1801	2	2	7	0	
3	Mr ADARSH JAISWAL	BCSE1802	3	2	6	0	
4	Mr ARJUN AMAN KAPAHI	BCSE1804	0	0	20	0	
5	Mr ARYAN DEEPAK LAL	BCSE1805	3	3	10	0	
6	Mr BHARAT B NAIR	BCSE1806	5	5	4	0	
7	Mr ROHIT BHATIA	BCSE1807	2	2	13	0	
8	Mr DIPESH ARYA	BCSE1808	3	4	6	0	
9	Mr UTKARSH NAYAN	BCSE1809	4	2	2	0	
10	Mr HARIESH S KUMAR	BCSE1810	3	4	9	0	
11	Mr HEMANT PATHAK	BCSE1811	3	2	2	0	
12	Mr HUSSNE MUBARAK	BCSE1812	1	2	13	0	
13	Mr KARTIK VARSHNEY	BCSE1813	0	3	4	0	
14	Mr KAVALA SATYA SRI SAI PHANINDRA	BCSE1814	1	4	7	0	
15	Mr LOHITH S	BCSE1815	1	2	17	0	
16	Mr MAHINDRA REDDY SURAM	BCSE1816	2	1	3	0	
17	Mr N.M.V MURALI KRISHNA	BCSE1818	1	3	2	0	
18	Mr OMKAR SOMNATHE	BCSE1819	1	4	3	0	
19	Mr PARUCHURI V SUBHASH CHANDRA	BCSE1820	3	1	14	0	
20	Mr RAHUL VASHISTHA	BCSE1822	3	4	3	0	
21	Mr SAI HARSHA VARDHAN A.V.N	BCSE1823	1	0	4	0	
22	Mr SAURABH PRADEEP SHUKLA	BCSE1824	4	0	12	0	
23	Mr SAYED FAIZ KAMRUDDIN	BCSE1825	4	3	9	0	
24	Mr SHAURYA SOOD	BCSE1826	1	0	9	0	
25	Mr SWAPNIL THAKUR	BCSE1827	2	0	3	0	
26	Mr USHARNAV BHATTACHARYA	BCSE1828	5	1	7	0	
27	Mr VENKATSAIGAUTAM BATHINA	BCSE1829	2	5	11	0	
28	Ms GEHLOT MAMTA OMPRAKASH	BCSE1832	3	2	11	0	
29	Ms KEVADIA MUDRA RAMESH	BCSE1833	2	0	8	0	
30	Ms K. SURESH	BCSE1834	0	0	10	0	

generatingfile2 ☆ 📁 ☁

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100% \$ % .0 .00 123 Arial 10 B I A

M6 - fx

	A	B	C	D	E	F	G	
1	Name	Roll	Sick leave	On Duty Leave	Attended days	Special Case	Regularity	
2	Mr ABHISHEK K	BCSE1801	2	2	7	0 No		
3	Mr ADARSH JAI	BCSE1802	3	2	6	0 No		
4	Mr ARJUN AMA	BCSE1804	0	0	20	0 Yes		
5	Mr ARYAN DEE	BCSE1805	3	3	10	0 No		
6	Mr BHARAT B N	BCSE1806	5	5	4	0 No		
7	Mr ROHIT BHAT	BCSE1807	2	2	13	0 Yes		
8	Mr DIPESH ARY	BCSE1808	3	4	6	0 No		
9	Mr UTKARSH N	BCSE1809	4	2	2	0 No		
10	Mr HARIESH S	BCSE1810	3	4	9	0 No		
11	Mr HEMANT PA	BCSE1811	3	2	2	0 No		
12	Mr HUSSNE M	BCSE1812	1	2	13	0 Yes		
13	Mr KARTIK VAR	BCSE1813	0	3	4	0 No		
14	Mr KAVALA SAT	BCSE1814	1	4	7	0 Yes		
15	Mr LOHITH S	BCSE1815	1	2	17	0 Yes		
16	Mr MAHINDRA	BCSE1816	2	1	3	0 No		
17	Mr N.M.V MURA	BCSE1818	1	3	2	0 No		
18	Mr OMKAR SON	BCSE1819	1	4	3	0 No		
19	Mr PARUCHURI	BCSE1820	3	1	14	0 No		
20	Mr RAHUL VAS	BCSE1822	3	4	3	0 No		
21	Mr SAI HARSHA	BCSE1823	1	0	4	0 No		
22	Mr SAURABH P	BCSE1824	4	0	12	0 No		
23	Mr SAYED FAIZ	BCSE1825	4	3	9	0 No		
24	Mr SHAURYA S	BCSE1826	1	0	9	0 No		
25	Mr SWAPNIL T	BCSE1827	2	0	3	0 No		
26	Mr USHARNAV	BCSE1828	5	1	7	0 No		
27	Mr VENKATSAI	BCSE1829	2	5	11	0 Yes		
28	Ms GEHLOT MA	BCSE1832	3	2	11	0 No		
29	Ms KEVADIA MI	BCSE1833	2	0	8	0 No		

- To determine the accuracy of this project.

```
[11] from sklearn.metrics import accuracy_score
      accuracy_score(y_test, prediction)
```

```
0.9523809523809523
```

```
accuracy_score(y2, prediction2)
```

```
0.6716417910447762
```

- To extract and send status to people who have low regularity

studentlist - Copy

File Edit View Insert Format Data Tools Add-ons Help

fx

Sr. No	Enrolment No	Student Name	Roll No	Email-id	Branch	No
1	A70405218027	Mr ABHISHEK K	BCSE1801	abhishek.lalwani	CSE	919004944330
2	A70405218090	Mr ADARSH JAI	BCSE1802	adarsh.jaiswal@	CSE	919004944330
3	A70405218037	Mr ARJUN AMAL	BCSE1804	arjun.kapahi@s.	CSE	919004944330
4	A70405218020	Mr ARYAN DEE	BCSE1805	aryan.lal@s.ami	CSE	919004944330
5	A70405218024	Mr BHARAT B N	BCSE1806	bharat.nair@s.a	CSE	919004944330
6	A70405218056	Mr ROHIT BHAT	BCSE1807	bhatia.rohit@s.a	CSE	919004944330
7	A70405218059	Mr DIPESH ARY	BCSE1808	dipesh.arya@s.	CSE	919004944330
8	A70405217045	Mr UTKARSH N	BCSE1809	utkarsh.nayan@	CSE	919004944330
9	A70405218040	Mr HARIESH S	BCSE1810	hariesh.kumar@	CSE	919004944330
10	A70405218046	Mr HEMANT PA	BCSE1811	hemant.pathak@	CSE	919004944330
11	A70405218023	Mr HUSSSNE M	BCSE1812	hussne.mubara	CSE	919004944330
12	A70405218029	Mr KARTIK VAR	BCSE1813	kartik.varshney@	CSE	919004944330
13	A70405218016	Mr KAVALA SAT	BCSE1814	kavala.phanindr	CSE	919004944330
14	A70405218013	Mr LOHITH S	BCSE1815	lohith.s@s.amity	CSE	919004944330
15	A70405218009	Mr MAHINDRA F	BCSE1816	mahindra.suram	CSE	919004944330
16	A70405218022	Mr N.M.V MURA	BCSE1818	n.krishna@s.am	CSE	919004944330
17	A70405218012	Mr OMKAR SOM	BCSE1819	omkar.somnathe	CSE	919004944330
18	A70405218011	Mr PARUCHURI	BCSE1820	paruchuri.chand	CSE	919004944330
19	A70405218018	Mr RAHUL VASH	BCSE1822	rahul.vashista1	CSE	919004944330
20	A70405218054	Mr SAI HARSHA	BCSE1823	sai.avn@s.amity	CSE	919004944330
21	A70405218042	Mr SAURABH P	BCSE1824	saaurabh.shukla7	CSE	919004944330
22	A70405218028	Mr SAYED FAIZ	BCSE1825	sayed.kamruddin	CSE	919004944330
23	A70405218006	Mr SHAURYA S	BCSE1826	shaurya.sood@:	CSE	919004944330
24	A70405218033	Mr SWAPNIL TH	BCSE1827	swapnil.thakur@	CSE	919004944330
25	A70405218051	Mr USHARNAV	BCSE1828	usharnav.bhatta	CSE	919004944330
26	A70405218010	Mr VENKATSAI	BCSE1829	venkatsaigautan	CSE	919004944330
27	A70405218063	Ms GEHLOT MA	BCSE1832	gehlot.omprakash	CSE	919004944330
28	A70405218058	Ms KEVADIA M	BCSE1833	kevadia.ramesh	CSE	919004944330
29	A70405218019	Ms L P SHREYA	BCSE1834	l.shreya@s.amit	CSE	919004944330
30	A70405218005	Ms PRIYANSHI	BCSE1835	priyanshi.chatun	CSE	919004944330
31	A70405218008	Ms REHMAT IQ	BCSE1836	rehmat.irphany@	CSE	919004944330

```
C:\Users\smart\AppData\Local\Programs\Python\Python39\python.exe
['Mr ABHISHEK KUMAR LALWANI', 'BCSE1801']
['Mr ADARSH JAISWAL', 'BCSE1802']
['Mr ARYAN DEEPAK LAL', 'BCSE1805']
['Mr BHARAT B NAIR', 'BCSE1806']
['Mr DIPESH ARYA', 'BCSE1808']
['Mr UTKARSH NAYAN', 'BCSE1809']
['Mr HARIESH S KUMAR', 'BCSE1810']
['Mr HEMANT PATHAK', 'BCSE1811']
['Mr KARTIK VARSHNEY', 'BCSE1813']
['Mr MAHINDRA REDDY SURAM', 'BCSE1816']
['Mr N.M.V MURALI KRISHNA', 'BCSE1818']
['Mr OMKAR SOMNATHE', 'BCSE1819']
['Mr PARUCHURI V SUBHASH CHANDRA', 'BCSE1820']
['Mr RAHUL VASHISTHA', 'BCSE1822']
['Mr SAI HARSHA VARDHAN A.V.N', 'BCSE1823']
['Mr SAURABH PRADEEP SHUKLA', 'BCSE1824']
['Mr SAYED FAIZ KAMRUDDIN', 'BCSE1825']
['Mr SHAURYA SOOD', 'BCSE1826']
['Mr SWAPNIL THAKUR', 'BCSE1827']
['Mr USHARNAV BHATTACHARYA', 'BCSE1828']
['Ms GEHLOT MAMTA OMPRAKASH', 'BCSE1832']
['Ms KEVADIA MUDRA RAMESH', 'BCSE1833']
['Ms PRIYANSHI CHATURVEDI', 'BCSE1835']
['Ms REHMAT IQBAL IRPHANY', 'BCSE1836']
['Ms RUHI JAISWAL', 'BCSE1837']
['Ms SATSANDHISCHHA', 'BCSE1838']
['Ms SIMARAN SINGH CHAUHAN', 'BCSE1839']
['Mr ABHAY TIWARI', 'BCSE1840']
['Mr JAGDALE RAJ RAM', 'BCSE1842']
['Mr SANAH SALEEM', 'BCSE1844']
```



