```
import pandas as pd
import numpy as np
```

Task 1

```
data = {"Names":
['Eeshwar','Dhruv','Sanj','Kriti','Anmol','Pranavesh','Gangadhar','Bha
rgavi','Nitin','Rishab'],
        "Reg_no":[8935,7247,8094,7453,8567,7243,7920,7999,7665,8243],
        'School':
['SCOPE','SCOPE','SCOPE','SENSE','SCOPE','SCOPE','SCOPE','SCOPE','SENS
E','SENSE'],
        "Course Type":
["Specialisation",'Core','Core',"Specialisation","Specialisation","Spe
cialisation",'Core','Core','Core',"Specialisation"],
        "Spz_name":['AI/ML',np.nan,np.nan,'CyberSec','Edge
computing','AI/ML',np.nan,np.nan,np.nan,'AIML']}

df = pd.DataFrame(data)

df
```

	Names	Reg_no	School	Course Type	Spz_name
0	Eeshwar	8935	SCOPE	Specialisation	AI/ML
1	Dhruv	7247	SCOPE	Core	NaN
2	Sanj	8094	SCOPE	Core	NaN
3	Kriti	7453	SENSE	Specialisation	CyberSec
4	Anmol	8567	SCOPE	Specialisation	Edge computing
5	Pranavesh	7243	SCOPE	Specialisation	AI/ML
6	Gangadhar	7920	SCOPE	Core	NaN
7	Bhargavi	7999	SCOPE	Core	NaN
8	Nitin	7665	SENSE	Core	NaN
9	Rishab	8243	SENSE	Specialisation	AIML

Task 2

```
df.info()
```

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 10 entries, 0 to 9
Data columns (total 5 columns):
 #   Column       Non-Null Count  Dtype
---  ------       --------------  -----
 0   Names        10 non-null     object
 1   Reg_no       10 non-null     int64
 2   School       10 non-null     object
 3   Course Type  10 non-null     object
 4   Spz_name     5 non-null      object
dtypes: int64(1), object(4)
memory usage: 528.0+ bytes
```

Task 3

```
df.describe()
```

```
            Reg_no
count    10.000000
mean   7936.600000
std     555.907306
min    7243.000000
25%    7506.000000
50%    7959.500000
75%    8205.750000
max    8935.000000
```

Task 4

```
df.loc[4]
```

```
Names                   Anmol
Reg_no                   8567
School                  SCOPE
Course Type    Specialisation
Spz_name       Edge computing
Name: 4, dtype: object
```

Task 5

```
df.isnull()
```

```
   Names  Reg_no  School  Course Type  Spz_name
0  False   False   False        False     False
1  False   False   False        False      True
2  False   False   False        False      True
3  False   False   False        False     False
4  False   False   False        False     False
5  False   False   False        False     False
6  False   False   False        False      True
7  False   False   False        False      True
8  False   False   False        False      True
9  False   False   False        False     False
```