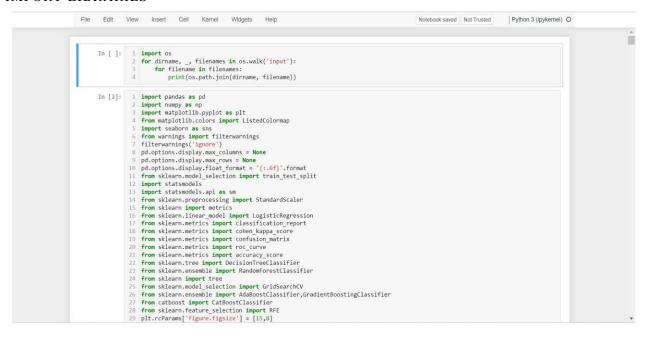
# **Analytics for Hospitals Health-Care Data**

## **TEAM ID: PNT2022TMID16326**

## IMPORT LIBRARIES



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In [3]:	<pre>1 train = pd.read_csv("D:/HealthCare/train_data.csv") 2 test = pd.read_csv("D:/HealthCare/test_data.csv")</pre>												
In [4]:	1	1 train.head()											
Out[4]:		ase_id H	iospital_code Hospital	_type_code City_Co	ode_Hospital Hospita	al_region_code F	railable Extra Rooms in ospital	Department	Ward_Type	Ward_Facility_C	Code	Bed Grade	pati
	0	1	8	c	3	Z	3	radiotherapy	R		F	2.000000	8
	1	2	2	С	5	Z	2	radiotherapy	s		F	2.000000	3
	2	3	10	е	1	Х	2	anesthesia	S		Е	2.000000	ē
	3	4	26	b	2	Υ	2	radiotherapy	R		D	2.000000	3
	4	5	26	b	2	Υ	2	radiotherapy	S		D	2.000000	3
	4												<b>+</b>
In [5]:	1 print(train.shape) 2 print(test.shape)												
	(318438, 18) (137057, 17)												
In [6]:	1	train.d	types										
Out[6]:	Hosp	_id ital_cod ital_typ		int64 int64 object									

```
File Edit View Insert Cell Kernel Widgets Help
                                                                                                                                                                                                                     Not Trusted Python 3 (ipykernel) O
                          Available Extra Rooms in Hospital
                                                                                                  int64
                                                                                                 object
                        Department
Ward Type
Ward Facility_Code
Bed Grade
patientid
City_Code_Patient
Type of Admission
Severity of Illness
Visitors with Patient
                                                                                                object
                                                                                              object
float64
int64
float64
                                                                                                object
object
int64
                         Age
Admission_Deposit
                                                                                               object
float64
                        Stay
dtype: object
                                                                                                object
         In [7]: 1 train.nunique()
         Out[7]: case_id
                         Hospital code
                                                                                                      32
7
                         Hospital_type_code
City_Code_Hospital
Hospital_region_code
Available Extra Rooms in Hospital
                                                                                                      18
5
6
                        Available Extra Rooms :
Department
Ward Type
Ward Facility_Code
Bed Grade
patientid
City_Code_Patient
Type of Admission
Severity of Illness
Visitors with Patient
Age
                                                                                                      37
                         Age
Admission_Deposit
                                                                                                      10
                                                                                                  7300
                         Stay
dtype: int64
```

### **CHANGE DATA TYPES**

```
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                                                                                                                                                                                                          Not Trusted
                                                                                                                                                                                                                                 Python 3 (ipykernel) O
         In [8]: 1 train.duplicated().sum()
        Out[8]: 0
       In [9]: 1 train['Hospital_code'] = train['Hospital_code'].astype(object)
2 train['City_Code_Hospital'] = train['City_Code_Hospital'].astype(object)
3 train['Available Extra Rooms in Hospital'] = train['Available Extra Rooms in Hospital'].astype(object)
4 train['Bed Grade'] = train['Bed Grade'].astype(object)
5 train['City_Code_Patient'] = train['City_Code_Patient'].astype(object)
      In [10]: 1 train.dtypes
       Out[10]: case id
                                                                                             int64
                       Hospital_code
Hospital_type_code
City_Code_Hospital
Hospital_region_code
                                                                                           object
object
                                                                                            object
                                                                                            object
                        Available Extra Rooms in Hospital
                        Department
                                                                                            object
                        Ward_Type
Ward_Facility_Code
                                                                                            object
                                                                                            object
                        Bed Grade
patientid
                                                                                           object
int64
                        City_Code_Patient
Type of Admission
                                                                                           object
object
                        Severity of Illness
Visitors with Patient
                                                                                           object
int64
                        Age
Admission_Deposit
                                                                                         object
float64
                        Stay
dtype: object
                                                                                           object
      In [11]: 1 test['Hospital_code'] = test['Hospital_code'].astype(object)
2 test['City_Code_Hospital'] = test['City_Code_Hospital'].astype(object)
3 test['Available Extra Rooms in Hospital'] = test['Available Extra Rooms in Hospital'].astype(object)
```

#### REMOVE INSIGNIFICANT VARIABLES

