

## DATA TYPES

TABLE:staff

COLUMN NAME	DATATYPE	COLUMN CONSTRAINT	USER INPUT VALIDATION CONDITION
name	varchar(50)	not null	If not string raise error(only . and space are allowed)
staffid	int(6)	notnull ,unique,primary key	AUTO GENEREATE
gender	char(1)	M or F	If gender not in m,f raise error
dateofbirth	date		Format:yyyy-mm-dd If not in above format raise error If year<1900 and year>=currentyear Raise error If not 1<=month<=12 raise a error 1<=date<=30 and month in (04,06,09,11) 1<=date<=31 and month in (01,03,05,07,08,10,12) If 1<=date<=29 and year%4==0 and month=02 If 1<=date<=28 and year%4!=0 and month=02  If date of birth>=currentdate raise error
address	varchar(100)		
contactno	varchar(10)		If not 10 digits show a

			error
dateofjoining	date		If date of birth<=doj show error
qualification	varchar(10)		
departmentcode	int(3)	Foreign key	If departmentcode do not exist show a error
jobtitlecode	int(3)	Notnull,foreign key	If job title code does not exist show a error
basicpay	int(6)		If basic pay<=0 raise an error. If basic pay is not integer raise an error.
password	varchar(8)	Notnull unique	If password doesn't meet the conditions show an error(1 special character, 1 digit, 1 capital letter, minimum 5 characters maximum 8 characters)

TABLE:student

COLUMN NAME	DATATYPE	COLUMN CONSTRAINT	USER INPUT VALIDATION CONDITION
registrationno	int(6)	Notnull unique primarykey	Auto Generated
dateofadmission	date	notnull	If DOA<DOB give error
rollnumber	int(6)	Notnull	Auto Generated
name	varchar(50)	notnull	If not string raise error(only . and space are allowed)
gender	char(1)	notnull	If not M ,F show error
dateofbirth	date	notnull	If DOB<DOA give error
address	varchar(100)	notnull	
parentphonen	varchar(10)	notnull	If no of digits not equal to 10 give a error
class	varchar(5)	notnull	
section	varchar(5)	notnull	

TABLE:result

COLUMN NAME	DATATYPE	COLUMN CONSTRAINT	USER INPUT VALIDATION CONDITION
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registrationno	int(6)	Foreign key	If regno not in student table give error
subjectcode	int(3)	Foreign key,not null	If subject code not in subject table give error
markobtained	int(3)	notnull	If mark>100 give error
passmark	int(3)	notnull	If passmark>maxmark raise error
maximummark	int(3)	notnull	If maxmark<passmark Give error.If maxmark>100 or maxmark<=0 raise error.
result	char(1)	notnull	If result not in (P,F,A) raise error P-pass F-fail A-absent

TABLE:jobtitles

COLUMN NAME	DATATYPE	COLUMN CONSTRAINT	USER INPUT VALIDATION CONDITION
jobtitlecode	int(3)	Not Null unique primary key	AUTO GENERATED
jobtitle	varchar(25)	notnull	If jobtitle already exists give error

TABLE:department

COLUMN NAME	DATATYPE	COLUMN	USER INPUT
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		CONSTRAINT	VALIDATION CONDITION
departmentcode	int(3)	Notnull unique primarykey	AUTO GENERATED
department	varchar(20)	notnull	If department already exists give error

TABLE:subject

COLUMN NAME	DATATYPE	COLUMN CONSTRAINT	USER INPUT VALIDATION CONDITION
subjectcode	int(3)	Notnull unique primarykey	AUTO GENERATED
subject	varchar(20)	notnull	If subject already exists give error

NOTE:Please mention the size in parentheses along with datatype.User input validation condition is the condition that needs to be checked when we are getting user inputs for the columns by using the program.