

## **Project Technical Specialist I Exam**

### **Part I. Machine Learning**

1. Train any machine learning model
2. Deploy the model to the web
  - Has a prediction functionality
  - Any free web hosting or your personal portfolio
  - Kindly incorporate creative layout and design to demonstrate/display your skills.

(optional) To aid you in this assignment, kindly see attached dataset which you can build a machine learning algo to predict if an Australian will buy a bike according to these factors in the dataset.

### **Part II. Database query**

1. Write an SQL query to fetch first name of the student in upper case.
2. Write an SQL query to fetch unique values of Major subjects from student table.
3. List all student and their scholarship amounts if they have received any. If a student has not received a scholarship, display Null for the scholarship details
4. Write an SQL query to list student id who does not get scholarship.

Student Table

STUDENT_ID	FIRST_NAME	LAST_NAME	GPA	ENROLLMENT_DATE	MAJOR
201	Shivansh	Mahajan	8.79	2021-09-01 09:30:00	Computer Science
202	Umesh	Sharma	8.44	2021-09-01 08:30:00	Mathematics
203	Rakesh	Kumar	5.60	2021-09-01 10:00:00	Biology
204	Radha	Sharma	9.20	2021-09-01 12:45:00	Chemistry
205	Kush	Kumar	7.85	2021-09-01 08:30:00	Physics
206	Prem	Chopra	9.56	2021-09-01 09:24:00	History
207	Pankaj	Vats	9.78	2021-09-01 02:30:00	English
208	Navleen	Kaur	7.00	2021-09-01 06:30:00	Mathematics

Program Table

STUDENT_REF_ID	PROGRAM_NAME	PROGRAM_START_DATE
201	Computer Science	2021-09-01 00:00:00
202	Mathematics	2021-09-01 00:00:00
208	Mathematics	2021-09-01 00:00:00
205	Physics	2021-09-01 00:00:00
204	Chemistry	2021-09-01 00:00:00
207	Psychology	2021-09-01 00:00:00
206	History	2021-09-01 00:00:00
203	Biology	2021-09-01 00:00:00

## Scholarship Table

STUDENT_REF_ID	SCHOLARSHIP_AMOUNT	SCHOLARSHIP_DATE
201	5000	2021-10-15 00:00:00
202	4500	2022-08-18 00:00:00
203	3000	2022-01-25 00:00:00
201	4000	2021-10-15 00:00:00