

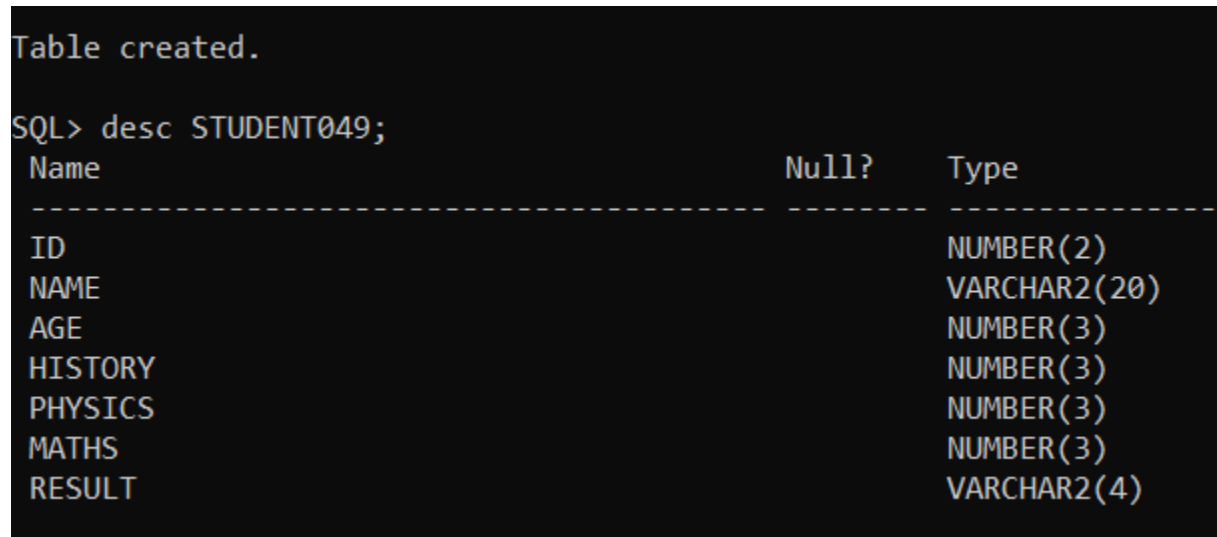
RA1811028010049

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CSE-CC J2

DBMS LAB EXP 9 : TRIGGERS

create table STUDENT049 (Id number(2), Name varchar(20), Age number(3), Maths number(3), English number(3), Science number(3), Result varchar2(4));



The screenshot shows a terminal window with a black background and white text. It displays the output of a SQL command to describe a table named STUDENT049. The output is formatted as a table with three columns: Name, Null?, and Type. The columns are separated by dashed lines. The rows list the table's attributes: ID, NAME, AGE, HISTORY, PHYSICS, MATHS, and RESULT, each with their respective data types and nullability.

Name	Null?	Type
ID		NUMBER(2)
NAME		VARCHAR2(20)
AGE		NUMBER(3)
HISTORY		NUMBER(3)
PHYSICS		NUMBER(3)
MATHS		NUMBER(3)
RESULT		VARCHAR2(4)

1. TRIGGER FOR DISPLAYING GRADE OF THE STUDENT(Before inserting a record).

```
CREATE OR REPLACE TRIGGER grade_display
BEFORE INSERT ON STUDENT049
FOR EACH ROW
BEGIN
IF (:NEW.History >=50 and :NEW.Physics >= 50 and :NEW.Maths >= 50) THEN
:NEW.Result := 'PASS';
ELSE
:NEW.Result := 'FAIL';
END IF;
END;
/
```

```

SQL> CREATE OR REPLACE TRIGGER grade_display
  2 BEFORE INSERT ON STUDENT049
  3 FOR EACH ROW
  4 BEGIN
  5 IF (:NEW.History >=50 and :NEW.Physics >= 50 and :NEW.Maths >= 50) THEN
  6 :NEW.Result := 'PASS';
  7 ELSE
  8 :NEW.Result := 'FAIL';
  9 END IF;
 10 END;
 11 /

Trigger created.

```

INSERT INTO STUDENT049 (Id, Name, Age, History, Physics, Maths) VALUES (01, 'Shushrut Kumar', 27, 99, 95, 100);

INSERT INTO STUDENT049 (Id, Name, Age, History, Physics, Maths) VALUES (02, 'Viren Parmar', 21, 92, 90, 95);

INSERT INTO STUDENT049 (Id, Name, Age, History, Physics, Maths) VALUES (03, 'Vidhi Rai', 49, 20, 55, 33);

```

SQL> select * from STUDENT049;

```

ID	NAME	AGE	HISTORY	PHYSICS	MATHS	RESU
1	Shushrut Kumar	27	99	95	100	PASS
2	Viren Parmar	21	92	90	95	PASS
3	Vidhi Rai	49	20	55	33	FAIL

2. PROGRAM TO INDICATE INVALID CONDITION USING TRIGGER(if age>100,before insert)

```
CREATE OR REPLACE TRIGGER invalid_age
```

```
BEFORE INSERT ON STUDENT046
```

```
FOR EACH ROW
```

```
BEGIN
```

```
IF :NEW.Age > 100 THEN
```

```
raise_application_error(-20000, 'YOU ARE INSERTING INVALID AGE!!');
```

END IF;

END;

/

```
SQL> CREATE OR REPLACE TRIGGER invalid_age
  2  BEFORE INSERT ON STUDENT049
  3  FOR EACH ROW
  4  BEGIN
  5  IF (:NEW.Age > 100) THEN
  6  raise_application_error(-20000, 'INSERTING INVALID AGE!');
  7  END IF;
  8  END;
  9  /
```

Trigger created.

INSERT INTO STUDENT049 (Id, Name, Age, History, Physics, Maths) VALUES (04, 'Sachin Tilokani', 120, 100, 49, 88),
'Sachin Tilokani', 120, 100, 49, 88);

```
SQL> INSERT INTO STUDENT049 (Id, Name, Age, History, Physics, Maths) VALUES (04, 'Sachin Tilokani', 120, 100, 49, 88);
INSERT INTO STUDENT049 (Id, Name, Age, History, Physics, Maths) VALUES (04, 'Sachin Tilokani', 120, 100, 49, 88)
*
ERROR at line 1:
ORA-20000: INSERTING INVALID AGE!
ORA-06512: at "RA1811028010049.INVALID_AGE", line 3
ORA-04088: error during execution of trigger 'RA1811028010049.INVALID_AGE'
```