



**BHARATIYA VIDYA BHAVAN'S**  
**SARDAR PATEL INSTITUTE OF TECHNOLOGY**  
MUNSHI NAGAR, ANDHERI (WEST), MUMBAI - 400 058, India  
(Autonomous College Affiliated to University of Mumbai)

Executed  
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**Duration: 1 hour**

**Marks: 25 Marks**

**General Instructions:**

Viva will be taken at the time of practical as well as after the practical if required.

The figures to the right indicate full marks.

If you are using any additional information, state it clearly.

Once you finish with the code show it to the examiner for testing. Write your answer in Word file and upload it on Moodle.

**UCID: 2023510065**

**Name: Shivaji Waru.**

<b>Q.1 A)</b>	<b>Consider the reservation database given below. The primary keys are underlined and the data types are specified:</b>  <b>Sailor</b> ( <u>Sname</u> : varchar(50), s_rating: number(10)) <b>Boat</b> ( <u>bname</u> : varchar(50), color: varchar(20), b_rating: number(10)) <b>Reservation</b> ( <u>sname</u> : varchar(50), <u>bname</u> : varchar(50), weekday: varchar(50)) a) Create the above tables by properly specifying the primary keys and the foreign keys and named constraints. b) Enter atleast five tuples for each relation. c) Write SQL query to create a view of Sailor table where rating is 10. d) Write SQL query to find boat details and Sailor details using join. e) Create Primary Index on Boat's name.	<b>10</b>
<b>B)</b>	Write PL/SQL trigger that raises an exception when number of Sailor's are greater than 5.	<b>10</b>
<b>C)</b>	Write PL/SQL code to show all the constraints defined on Sailor relation.	<b>5</b>

create database reservation;

use reservation;

a) Create table sailor (  
sname varchar(50) Primary key,  
s\_rating decimal(10,2));

Create table boat (  
bname varchar(50) Primary key,  
color varchar(20),  
b\_rating decimal(10,2));

create table reservation (  
sname varchar(50),  
bname varchar(50),  
weekday varchar(50),  
foreign key (sname) references  
sailor (sname),  
foreign key (bname) references  
boat (bname));

b) insert into sailor values ('Sam', 9);

('Pam', 10),

('Jay', 7),

('Jon', 3),

('Tom', 6);

insert into boat values

('Seaking', 'gold', 9),

('Seagiant', 'green', 8),

('Posiedon', 'white', 10),

('Waterbird', 'yellow', 6),

('Jellyfish', 'pink', 3);

insert into reservation values

('Sam', 'Seaking', 'Sunday'),

('Pam', 'Seagiant', 'Monday'),

('Jay', 'Posiedon', 'Tuesday'),

('Jon', 'Waterbird', 'Wednesday'),

('Tom', 'Jellyfish', 'Friday'));

c) Select sname from sailor where  
s\_rating = 10;

d) Select a.sname, a.s\_rating from  
sailor a join

reservation b where a.sname =

(Select b.sname from reservation where  
b.bname = (Select c.bname from boat c  
where b.bname = c.bname));

B] Create trigger before sailor-before-insert

Create trigger 'sailor-before-insert'

Before insert on 'sailor' for each row begin

declare errormsg varchar(250);

set errormsg varchar = "the no of  
sailor is greater";

if ((select count(new.sname) from sailor) > 5)

then

signal sqlstate '45000' set

message-text = errormsg;

end if;