**16. File upload SQL question**

**Please copy and paste the query you wrote in SQL into the space below, as well as the result**

**Here is some data of some scientists:**

|  |  |  |
| --- | --- | --- |
| **Name** | **Salary** | **Age** |
| **Albert Einstein** | **$31415.92** | **35** |
| **CV Raman** | **$1618.03** | **45** |
| **Marie Curie** | **$2718.28** | **55** |
| **Nikolai Tesla** | **$34568** | **23** |
| **Grace Hopper** | **$23569.34** | **43** |
| **Shakuntala Devi** | **$7686.36** | **43** |
| **Tessy Thomas** | **$34123.45** | **24** |

1. **Write the SQL commands to create this table (you can give it any name you want)**

CREATE TABLE scientists\_table

(

name VARCHAR2(30),

salary NUMBER(10,2),

age NUMBER

);

INSERT INTO scientists\_table

VALUES ('Albert Einstein', 31415.92, 35);

INSERT INTO scientists\_table

VALUES ('CV Raman', 1618.03, 45);

INSERT INTO scientists\_table

VALUES ('Marie Curie', 2718.28, 55);

INSERT INTO scientists\_table

VALUES ('Nikolai Tesla', 34568, 23);

INSERT INTO scientists\_table

VALUES ('Grace Hopper', 23569.34, 43);

INSERT INTO scientists\_table

VALUES ('Shakuntala Devi', 7686.36, 43);

INSERT INTO scientists\_table

VALUES ('Tessy Thomas', 34123.45, 24);

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1. **Write the query to find out which scientist(s) earns more than the average of all the scientists**

SELECT name

FROM scientists\_table

WHERE salary > (SELECT AVG(salary) FROM scientists\_table);

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1. **Write a query to find the person whose ratio of Salary to the age is the maximum.**

SELECT name, salary/age

FROM scientists\_table

WHERE salary/age = (SELECT MAX(salary/age) FROM scientists\_table);

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1. **Split the name field into two fields: Firstname and Lastname, and remove the column Name and then dump the entire new table**

ALTER TABLE scientists\_table

ADD (

firstname VARCHAR2(50),

lastname VARCHAR(50)

);

UPDATE scientists\_table

SET

firstname = SUBSTR(name, 1, INSTR(name, ' ') - 1),

lastname = SUBSTR(name, INSTR(name, ' ') + 1);

ALTER TABLE scientists\_table

DROP COLUMN name;

SELECT \* FROM scientists\_table;

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**Note**: Assuming dump the entire table as to display the entire table

1. **Write a query to find the person who is closest in age to the average age of everyone in the table**

SELECT firstname, lastname

FROM (

SELECT firstname,lastname, ABS(age - (SELECT AVG(age) FROM scientists\_table)) AS closest\_age

FROM scientists\_table

ORDER BY closest\_age

)

WHERE ROWNUM = 1;

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