Techincal University of Moldova
Factuly of Computers, Informatics and Microelectronics

Report
On Databases and Knowledge
Lab 3

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Task 1

Care din numerele prezentate mai jos pot fi introduse intr-un cimp de tipul DECIMAL(4, 1)

1. 16.2
2. 116.2
3. 16.21
4. 1116.2
5. 1116.21

Raspuns: 16.2; 116.2

Task 2

Creati o baza de date numita calculatoare cu proprietati implicite. Creati, in cadrul acestei baze de date, cele 4 tabele (produse, pc uri, laptop uri, imprimante).

```
CREATE TABLE produse(
producator CHAR(1) NOT NULL,
model VARCHAR(4) NOT NULL,
tip VARCHAR(10) NOT NULL
);
```

Figure 1: Produse schema creation

```
CREATE TABLE pc_uri(
cod INT NOT NULL,
model INT NOT NULL,
viteza INT NOT NULL,
ram int NOT NULL,
hd int NOT NULL,
cd varchar(5) NOT NULL,
pret int NOT NULL
);
```

Figure 2: PC URI schema creation

```
CREATE TABLE laptop_uri(
cod INT NOT NULL,
model INT NOT NULL,
viteza INT NOT NULL,
ram INT NOT NULL,
hd INT NOT NULL,
pret INT NOT NULL,
ecran INT NOT NULL
);
```

Figure 3: Laptop uri schema creation

```
CREATE TABLE imprimante(
cod INT NOT NULL,
model INT NOT NULL,
color BIT NOT NULL,
tip VARCHAR(16) NOT NULL,
pret int NOT NULL
);
```

Figure 4: Imprimante schema creation

In the figures above, I created the four required schemas using the CREATE TABLE statement and the columns indicated in the schemas.

Task 3

Inserati in tabelele respective ale bazei de date calculatoare inregistrarile

```
INSERT INTO produse(producator, model, tip)
VALUES
    ('B', 1121, 'PC'),
    ('A', 1232, 'PC'),
    ('A', 1233, 'PC'),
    ('E', 1260, 'PC'),
    ('A', 1276, 'Imprimante'),
    ('D', 1288, 'Imprimante'),
    ('A', 1298, 'Laptop_uri'),
    ('C', 1321, 'Laptop_uri'),
    ('A', 1401, 'Imprimante'),
    ('A', 1408, 'Imprimante'),
    ('D', 1433, 'Imprimante'),
    ('E', 1434, 'Imprimante'),
    ('B', 1750, 'Laptop_uri'),
    ('A', 1752, 'Laptop_uri'),
    ('E', 2111, 'PC'),
    ('E', 2112, 'PC');
```

Figure 5: Insert data into produse

```
INSERT INTO pc_uri(cod, model, viteza, ram, hd, cd, pret)
VALUES
    (1, 1232, 500, 64, 5, '12x', 600),
    (1, 1121, 750, 128, 14, '40x', 850),
    (1, 1233, 500, 64, 5, '12x', 600),
    (1, 1121, 600, 128, 14, '40x', 850),
    (1, 1121, 600, 128, 8, '40x', 850),
    (1, 1233, 750, 128, 20, '50x', 950),
    (1, 1232, 500, 32, 10, '12x', 400),
    (1, 1232, 450, 64, 8, '24x', 350),
    (1, 1232, 450, 32, 10, '24x', 350),
    (1, 1260, 500, 32, 10, '12x', 350),
    (1, 1233, 900, 128, 40, '40x', 980);
```

Figure 6: Insert data into PC uri

Figure 5 presents the insertion of data into the produse schema using the INSERT INTO statement. Also, Figure 6 shows that all the data was inserted correctly using the SELECT statement. The following figures present the same things as Figures 5 and 6 only for different schemas.

```
INSERT INTO laptop_uri(cod, model, viteza, ram, hd, pret, ecran)
VALUES
    (1, 1298, 350, 32, 4, 700, 11),
    (2, 1321, 500, 64, 8, 970, 12),
    (3, 1750, 750, 128, 12, 1200, 14),
    (4, 1298, 600, 64, 10, 1050, 15),
    (5, 1752, 750, 128, 10, 1150, 15),
    (6, 1298, 450, 64, 10, 950, 12);
```

Figure 7: Insert data into Laptop uri

```
INSERT INTO imprimante(cod, model, color, tip, pret)
VALUES
    (1, 1276, 0, 'Laser', 400),
    (2, 1433, 1, 'Jet', 270),
    (3, 1434, 1, 'Jet', 290),
    (4, 1401, 0, 'Matrix', 150),
    (5, 1408, 0, 'Matrix', 270),
    (6, 1288, 0, 'Laser', 400);
```

Figure 8: Insert data into Imprimante

Conclusion

During this laboratory work, I created 4 schemas in a databse. I learned how to work with the CREATE TABLE statement and the INSERT INTO statement. Also, I learned about the data types while defining the columns in the schemas.