%%%

Open vragen

Antwoord vraag 1 a en b: pag 17 (Ed III) tabel 1.3 (Ed III)
pag 23 (Ed IV) tabel 1.5 (Ed IV)

1. a)

capture
transmit
store
retrieve
manipulate
display

1. b)

capture: obtain a representation of information in a form permitting it to be transmitted or stored.

transmit: move information from one place to another.

store: move information to a specific place for later retrieval.

retrieve: find the specific information that is currently needed.

manipulate: create new information from existing information through summarizing, sorting, rearranging, reformatting, or other types of calculations.

display: show information to a person.

Antwoord staat op blz 17 (Ed III), en pag 22 (Ed IV):

1. c)

1. It captures information using bar code.
2. It transmits information to a computer that looks up the item's price and description.
3. It stores information about the item for calculating the bill.
4. It retrieves price and description information from the computer.
5. It manipulates the information from the computer.
6. It displays information when it shows each price it calculates and prints the receipt.

Als het zoiets is, is het goed. Hoeft niet precies gelijk te zijn.

Vraag 2 plus antwoord staat op blz 68 (Ed III) en pag 80 (Ed IV).

2. a)

1. customer

2. product
3. business process
4. participants
5. information
6. technology

2. b)

1. internal customers
2. external customers

Vraag 3 staat op blz 132 (Ed IV), en blz 108 (Ed III),
Antwoord op pag 172 (Ed IV), en pag 142 (Ed III).

3. a)

1. predefined data items
2. text
3. images
4. audio
5. video

3. b)

Antwoord staat op pag 137 (Ed IV) of 116 (Ed III):

The term database refers to a structured collection of electronically stored dtaat that is controlled and accessed through computers bvased on predefined relationships between predefined types of data items related to a specific business, situation, or problem.

Antwoord staat op op pag 138 (Ed IV) of 116 (Ed III):

3. c)

Antwoord: nee. because it lacks predefined relationships between predefined types of data items.

Vraag 4 staat op blz 180-181 (Ed IV 126, Chapter 3)

4 a)

1. intelligence
2. design
3. choice
4. implementation

4 b)

1. poor framing
2. recency effects
3. primacy effects
4. poor probability estimates
5. overconfidence
6. escalation phenomena
7. association bias
8. groupthink

4 c)

poor framing: allowing a decision to be influenced exessively by thelanguage used for describing the decision. Mensen kunnen ook een verhaal ophangen ala pag 123 (Ed IV bij poor framing) of pag 156 (Ed III). Dat rekenen we ook goed uiteraard.

%%%

Multiple-Choice vragen

5: c
6: d
7: a
8: d
9: b
10: d
11: c
12: b
13: d
14: d
15: c
16: c

%%%

Practicumvragen

17.

As an example we consider 3 relations: Flowers2002. Flowers2003, and Prices.

Flowers2002

Code	Name	Colour	Season
100	tulip	red	april
101	carnation	pink	may
102	rose	white	june

Flowers2003

Code	Name	Colour	Season
100	tulip	red	april
103	tulip	black	april
105	daisy	white	july
102	rose	white	june
106	rose	red	june

Prices

Code	Price(euro/piece)
100	2
101	1.50
102	3
103	3
105	1.50
106	3

(Formulae in .tex notation)

We suppose a given relation R.

- Selection operation, noted ${\sigma}_{C}(R)$, returns only the tuples from R which satisfy the condition c.
- Projection operation, noted ${\pi}_{L}(R)$, returns a relation with only the attributes of R specified in the list L.
- Union operation between two relations R and S, noted $R \cup S$, returns all tuples of R and S, with no duplicates.
The relations need to be union compatible, so they need to have the same attributes.
- Intersection between two relations R and S, noted $R \cap S$ returns a relation that contains only the tuples present both in R and in S.
The relations need to be union compatible
- Theta join operation between two relations R and S, noted $R \join_{J} S$, returns all tuples from R x S which satisfy the join condition J.

SELECTION Colour = white (Flowers2003)

Code	Name	Colour	Season
102	rose	white	may
105	daisy	white	july

PROJECTION Name, Season (Flowers2002)

Name	Season
tulip	april
carnation	may
rose	june

Flowers2002 UNION Flowers2003

Code	Name	Colour	Season
100	tulip	red	april
101	carnation	pink	may
102	rose	white	june
103	tulip	black	april
105	daisy	white	july
106	rose	red	june

Flowers2002 INTERSECTION Flowers203

```
Code    Name            Colour          Season
100     tulip           red         april
102   rose              white   june

Flowers2003 JOIN (Price < 2) Prices

Code  Name    Colour    Season   Price
105   daisy   white     july     1.50
```

18.

a) SELECT Naam FROM PersoneelVU
WHERE DatumInDienst > 2003-1-1 AND DatumInDienst < 2003-12-31 ;

b) SELECT Naam FROM PersoneelVU,Secretariaat_CS
WHERE PersoneelVU.MaandSalaris > 3000;

c) SELECT PersoneelVU.Naam,PersoneelVU.GeboorteDatum FROM
PersoneelVU,Verzekering,Apotheken
WHERE Verzekering.ApotheekCode=Apotheken.Code AND
Apotheken.Naam = 'Medicijnman';

d) INSERT INTO Huisartsen (Code,Naam,Adres)
VALUES (100,'Jong','Eliasstraat 3');

e) Find out the code of the Old doctor.

```
SELECT code FROM Huisartsen
WHERE Naam='Old'
```

Remember this code, say 90.

Link all thge clients of old to the new one:

```
UPDATE Verzekering
SET HuisartsCode = 100 WHERE HuisartsCode = 90;
```

Delete the old doctor:

```
DELETE FROM Huisartsen
WHERE Naam='Oud' ;
```

19.

a) Other combinations should be fine too.

```
mysql_connect
mysql_select_db
mysql_query(string, socket)
mysql_fetch_array
mysql_free_result
mysql_close
```

b) Using a HTML form the user can introduce his preferences. When they are submitted, a link to a PHP page is made and important parameters are transmitted The PHP script has functions dedicated to database access and manipulation. The result is a HTML page written using also PHP scripts.

c) The web client is usually a web browser.It is useful to provide inputs and retrieve outputs.

Webserver processes HTML forms. On the webserver stays a PHP engine which parses the PHP script and dynamically generates HTML code instead. Database server processses SQL queries.