

Test task_PHP Developer

1) Write a script that will give out any amount in words, e. g. 2355 = two thousand three hundred fifty five.

Tools and instruments: PHP

2) Write a script for the file and text search (text search inside the files). Use regular expressions.

Requirements:

- Search form: file name, 'text search' checkbox (when the checkbox is ticked off, the additional 'text search' field is displayed)
- Search in current directory
- Use *, ? masks for both file and text search Tools and instruments: PHP, regular expressions 3)

Create a Singleton class that controls the connection to the data storage. Various connection options such as an array, a DSN string, and an xml-file should be provided. Use the PHP

ADODB library for this task. As a result, the ADODB object should be created.

Tools and instruments: PHP OOP, PHP ADODB 4) See two tables below:

```
CREATE TABLE`Manufacturers` (  
  `id`int(11) NOT NULL AUTO_INCREMENT,  
  `name` varchar(30) NOT NULL,  
  PRIMARY KEY (`id`)  
) ENGINE=InnoDB
```

```
+----+-----+
```

```
| id | name |
```

```
+----+-----+
```

```
| 1 | CDEF Manufacturing |
```

```
| 2 | Dell Ltd |
```

```
| 3 | JDF Ltd |
```

```
| 4 | Motor inc |
```

```
+----+-----+
```

```
CREATE TABLE`parts` (  
  `id`int(11) NOT NULL AUTO_INCREMENT,
```

```
  `id`int(11) NOT NULL AUTO_INCREMENT,
```

```
`name` varchar(30) NOT NULL,

`man_id` int(11) NOT NULL,

PRIMARY KEY (`id`)

) ENGINE=InnoDB
```

```
+---+-----+-----+
| id | name | man_id |
+---+-----+-----+
| 1 | DVD burner | 1 |
| 2 | Laptop | 2 |
| 3 | Power supply | 2 |
| 4 | Display adapter | 3 |
| 5 | Network hub | 1 |
| 6 | Sound card | 3 |
+---+-----+-----+
```

Create the following queries:

- Extract the identifiers, names of the manufacturers and the corresponding component parts for *Del Ltd*, *JDF Ltd*.
- Extract the names and identifiers of the manufacturers the component parts of which are not specified.
- Change the identifier for *CDEF Manufacturing* from 1 to 5 and identifiers of the component parts that correspond to this manufacturer (with one query).
- Remove the *JDF Ltd* entry and the corresponding component parts (with one query).
- Has the following query been made in the optimum way?

```
SELECT p.name,m.name from parts p INNER JOIN Manufacturers m ON
p.man_id=m.id ORDER BY p.name DESC
```

If not, what should be done for its optimization?

6)

See the following table:

```
CREATE TABLE`quiz_answers` (
`q_id` int(11) NOT NULL AUTO_INCREMENT,
```

```

id`int(11) NOT NULL,
`to_widget_user_id` char(20) NOT NULL,
`to_widget_user_name` varchar(64) NOT NULL,
`date`int(11) NOT NULL,
`question`int(11) NOT NULL,
`answer` tinyint(2) NOT NULL,
`unlocked` tinyint(1) DEFAULT NULL,
`site_id` tinyint(3) unsigned NOT NULL DEFAULT '0', PRIMARY KEY (`q_id`),
UNIQUE KEY `answer`
(id`,`to_widget_user_id`,`question`,`answer`,`site_id`)
) ENGINE=InnoDB

```

Has the following query been made in the optimum way?

If not, what should be done for its optimization?

```
select count(*) from quiz_answers where to_widget_user_id=100001804947780 and site_id=35;
```

id	select_type	table	type	possible_keys	key	key_len	
ref	rows	Extra					
1	SIMPLE	quiz_answers	index	NULL	answer	70	
NULL	2140440	Using where; Using index					

