# Open database connection - once per script

```
$dbh = db_connect();
Basic query
$user_info_q = "select * from $users_table where user_id=:user_id";
$parameters = array(
        array('P' => ':user_id', 'V'=> $user_id, 'T' => 'I')
        );
$user_result = db_single_prepared_query($user_info_q, $parameters);
If a parameter is used more than once it must be declared with unique placeholders
$user_info_q = "select * from $users_table where user_id=:user_id or friend_id=user_id_f";
$parameters = array(
        array('P' => ':user_id', 'V'=> $user_id, 'T' => 'I'),
        array('P' => ':user_id_f', 'V'=> $user_id, 'T' => 'I')
Parameters array types (T)
I
        Integer
S
        String
        Null
For dates which may be NULL, add type S or N to $parameters as required, do not try to
insert NULL as a string.
No need to use addslashes()
Returning results
SELECT, INSERT, DELETE
$field= $user_result['ROWS'][$row_index]['field'];
$row index will typically be 0, or $i in a loop
SELECT, INSERT, DELETE
$numrows = $user_result['ROWCOUNT']; // Rows in result, affected or deleted
INSERT
$last_insert_id = $user_result['LASTID];
```

### **Looped queries**

\$access\_groups = db\_looped\_prepared\_query(\$access\_info\_q, 'accessinfo', \$parameters);

### **Transactions**

```
$dbh->beginTransaction();
$dbh->commit();
```

#### **Doing LIKE queries**

```
$linked guery = "select distinct($pages table.title)
          from $pages_table left join $page_fragment_contents_table using (page_id)
          where (int_link_id = :page_id OR image_1_int_link = :image_1_int_link
          OR image_2_int_link = :image_2_int_link
          OR title 1 int link = :title 1 int link
          OR text 1 like :text 1 page id
          OR text 2 like :text 2 page id
          OR text 3 like :text 3 page id)";
// need to pass this as a string
$for like matching page id = '%/page/' . $page id . '%';
$parameters = array(
          array('P' => ':page_id', 'V'=> $page_id, 'T' => 'I'),
         array('P' => ':image_1_int_link', 'V'=> $page_id, 'T' => 'I'), array('P' => ':image_2_int_link', 'V'=> $page_id, 'T' => 'I'), array('P' => ':title_1_int_link', 'V'=> $page_id, 'T' => 'I'),
         array('P' => ':text_1_page_id', 'V'=> $for_like_matching_page_id, 'T' => 'S'), array('P' => ':text_2_page_id', 'V'=> $for_like_matching_page_id, 'T' => 'S'), array('P' => ':text_3_page_id', 'V'=> $for_like_matching_page_id, 'T' => 'S')
          );
Results in:
Prepareselect distinct(pages.title)
from pages left join page fragment contents using (page id)
where (int_link_id = ? OR image_1_int_link = ?
OR image_2_int_link = ?
OR title_1_int_link = ?
OR text 1 like?
OR text_2 like?
OR text_3 like ?)
Execute
                    select distinct(pages.title)
from pages left join page fragment contents using (page id)
where (int_link_id = 339 OR image_1_int_link = 339
OR image_2_int_link = 339
OR title_1_int_link = 339
OR text_1 like '%/page/339%'
OR text_2 like '%/page/339%'
OR text 3 like '%/page/339%')
```

## WHERE IN queries (Integers)

```
Must create SQL like: where fragment_id in (:fid_0, :fid_1, :fid_2) order by sequence
Pass bindings like:
Array
  [0] => Array
    (
       [P] => :fid 0
       [V] => 3526
       [T] => I
  [1] => Array
       [P] => :fid_1
       [V] => 3540
       [T] => 1
  [2] => Array
       [P] => :fid_2
       [V] => 3527
       [T] => I
Execute: where fragment id in (3540,3527,3528) order by sequence
With list of IDs in an array:
        $parameters = array();
        $placeholders_array = array();
        for ($i=0;$i<count($unique_move_fragment_id_array);$i++)
                $fragment_id = $unique_move_fragment_id_array[$i];
                $place_holder = ":fid_" . $i;
                $placeholders_array[]=$place_holder;
                $parameters[] = array('P' => $place_holder, 'V'=> $fragment_id, 'T' => 'I');
                }
        $placeholders_str = implode ("," , $placeholders_array);
If in a CSV string use pdo in clause bindings ints()
```