

/\* Explanation of Data Insertion:

- Users: Inserting users **bob**, **mia**, and **raj**.
- Directories: Each directory is inserted with a reference to its **parent\_id** (null if its a root directory).
- Files: Files are linked to their corresponding directories through **parent\_id** and have specific timestamps and sizes.
- Permissions: Each permission entry determines the access level for users on specific files and directories, following the **rwX** pattern. \*/

```
INSERT INTO users (username, password) VALUES ('bob', 'password1'), ('mia', 'password2'), ('raj', 'password3');
```

```
INSERT INTO directories (name, parent_id, created_at, modified_at) VALUES ('linux', NULL, '2018-06-23 19:15:35', '2018-08-18 09:05:02'), ('drivers', 1, '2017-06-27 01:02:44', '2017-10-05 06:02:11'), ('perfctr', 2, '2021-10-19 15:58:04', '2021-11-13 10:21:53'), ('win2k', NULL, '2016-08-30 04:50:39', '2017-04-19 10:10:58'), ('shell', 4, '2020-08-13 21:18:45', '2021-07-04 22:32:53'), ('substrate', 4, '2020-11-18 16:16:19', '2021-03-16 15:28:57'), ('winpmc', NULL, '2015-10-11 05:21:17', '2017-01-30 15:14:55'), ('tools', 4, '2020-06-05 21:51:50', '2021-02-04 08:24:36'), ('papiex', 8, '2017-08-28 01:25:12', '2018-08-16 21:59:00'), ('src', 9, '2019-04-26 20:57:26', '2020-06-23 04:33:27'), ('tests', 8, '2022-11-16 14:46:10', '2023-10-07 20:57:47'), ('trapper', 8, '2015-02-14 20:25:29', '2016-02-06 19:51:11');
```

```
INSERT INTO files (name, parent_id, is_directory, size, created_at, modified_at) VALUES ('global.c', 3, 0, 1024, '2020-02-20 10:42:37', '2021-05-26 23:26:11'), ('init.c', 3, 0, 2048, '2016-07-26 12:23:02', '2017-08-24 07:09:18'), ('virtual_stub.c', 3, 0, 4096, '2018-10-10 23:47:55', '2019-04-10 14:48:45'), ('x86.c', 3, 0, 512, '2018-01-15 16:15:14', '2018-11-03 06:47:49'), ('x86_setup.c', 3, 0, 1024, '2018-10-27 00:39:55', '2019-09-07 06:40:58'), ('PAPI_Errors.c', 5, 0, 2048, '2019-05-13 04:13:56', '2020-02-06 15:38:45'), ('StdAfx.c', 5, 0, 4096, '2016-10-24 15:45:12', '2017-01-31 02:44:03'), ('test_get_cycles.c', 5, 0, 8192, '2015-04-24 06:19:12', '2015-10-05 06:32:17'), ('winpapi_console.c', 5, 0, 1024, '2018-01-18 20:54:10', '2019-04-23 06:14:16'), ('WinPAPIShell.c', 5, 0, 2048, '2017-01-06 11:26:27', '2017-05-30 03:03:00'), ('cpuinfo.c', 6, 0, 1024, '2019-12-23 23:43:26', '2020-09-28 00:04:11'), ('win32.c', 6, 0, 2048, '2016-03-20 22:36:50', '2017-07-13 05:11:46'), ('pmclib.c', 7, 0, 1024, '2020-04-09 16:57:35', '2020-08-09 10:52:07'), ('pmc_x86.c', 7, 0, 2048, '2023-03-25 17:19:41', '2024-05-17 04:13:35'), ('WinPMC.c', 7, 0, 4096, '2016-10-28 07:42:59', '2017-11-03 16:28:42');
```

```
/* Bob's Permissions */ INSERT INTO permissions (file_id, dir_id, user_id, read_permission, write_permission, execute_permission) VALUES (NULL, 1, 1, 1, 1, 1), -- Full access to 'linux' directory (NULL, 2, 1, 1, 1, 1), -- Full access to 'drivers' directory (4, NULL, 1, 1, 1, 0), -- Read/write access to 'global.c' (5, NULL, 1, 1, 1, 0); -- Read/write access to 'init.c'
```

```
/* Mia's Permissions */ INSERT INTO permissions (file_id, dir_id, user_id, read_permission, write_permission, execute_permission) VALUES (NULL, 4, 2, 1, 1, 1), -- Full access to 'win2k' directory (NULL, 5, 2, 1, 1, 1), -- Full access to 'shell' directory (12, NULL, 2, 1, 1, 0); -- Read/write access to 'PAPI_Errors.c'
```

```
/* Raj's Permissions */ INSERT INTO permissions (file_id, dir_id, user_id, read_permission, write_permission, execute_permission) VALUES (NULL, 7, 3, 1, 1, 1), -- Full access to 'winpmc' directory (44, NULL, 3, 1, 1, 0); -- Read/write access to 'pmclib.c'
```