**Soal A**

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| --- |
| CREATE TABLE `users` (  `id` int(11) NOT NULL,  `username` varchar(50) NOT NULL,  `email` varchar(50) NOT NULL,  `password` varchar(50) NOT NULL,  `created\_at` timestamp NULL DEFAULT NULL,  `updated\_at` timestamp NULL DEFAULT NULL  ) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4\_general\_ci;  INSERT INTO `users` (`id`, `username`, `email`, `password`, `created\_at`, `updated\_at`) VALUES  (1, 'Andi', 'andi@andi.com', '12345', '2019-01-27 21:15:29', '2019-01-27 21:15:29'),  (2, 'Budi', 'budi@budi.com', '67890', '2019-01-27 21:15:29', '2019-01-27 21:15:29'),  (3, 'Caca', 'caca@caca.com', 'abcde', '2019-01-27 21:15:29', '2019-01-27 21:15:29'),  (4, 'Deni', 'deni@Deni.com', 'fghij', '2019-01-27 21:15:29', '2019-01-27 21:15:29'),  (5, 'Euis', 'ceuis@euis.com', 'klmno', '2019-01-27 21:15:29', '2019-01-27 21:15:29'),  (6, 'Fafa', 'fafa@fafa.com', 'pqrst', '2019-01-27 21:15:29', '2019-01-27 21:15:29'); |

|  |
| --- |
| CREATE TABLE `courses` (  `id` int(11) NOT NULL,  `course` varchar(50) NOT NULL,  `mentor` varchar(50) NOT NULL,  `title` varchar(50) NOT NULL  ) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4\_general\_ci;  INSERT INTO `courses` (`id`, `course`, `mentor`, `title`) VALUES  (1, 'C++', 'Ari', 'Dr.'),  (2, 'C#', 'Ari', 'Dr.'),  (3, 'C#', 'Ari', 'Dr.'),  (4, 'CSS', 'Cania', 'S.Kom'),  (5, 'HTML', 'Cania', 'S.Kom'),  (6, 'Javascript', 'Cania', 'S.Kom'),  (7, 'Python', 'Barry', 'S.T.'),  (8, 'Micropython', 'Barry', 'S.T.'),  (9, 'Java', 'Daren', 'M.T.'),  (10, 'Ruby', 'Daren', 'M.T.'); |

|  |
| --- |
| CREATE TABLE `usercourse` (  `id\_user` int(11) DEFAULT NULL,  `id\_course` int(11) DEFAULT NULL  ) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4\_general\_ci;  INSERT INTO `usercourse` (`id\_user`, `id\_course`) VALUES  (1, 1),  (1, 1),  (1, 3),  (2, 4),  (2, 5),  (2, 6),  (3, 7),  (3, 8),  (3, 9),  (4, 1),  (4, 2),  (4, 3),  (5, 4),  (5, 5),  (5, 6),  (6, 7),  (6, 8),  (6, 9); |

1. SELECT u.id, u.username, c.course, c.mentor, c.title FROM courses as c INNER JOIN users as u INNER JOIN usercourse as uc WHERE uc.id\_user=u.id and uc.id\_course=c.id order By u.id
2. SELECT u.id, u.username, c.course, c.mentor, c.title FROM courses as c INNER JOIN users as u INNER JOIN usercourse as uc WHERE uc.id\_user=u.id and uc.id\_course=c.id and c.title LIKE 'S%' order By u.id
3. SELECT u.id, u.username, c.course, c.mentor, c.title FROM courses as c INNER JOIN users as u INNER JOIN usercourse as uc WHERE uc.id\_user=u.id and uc.id\_course=c.id and c.title NOT LIKE 'S%' order By u.id
4. SELECT Count(u.username), u.id, u.username, c.course, c.mentor, c.title FROM courses as c INNER JOIN users as u INNER JOIN usercourse as uc WHERE uc.id\_user=u.id and uc.id\_course=c.id order By u.id;
5. SELECT Count(u.username)\*2000000, u.id, u.username, c.course, c.mentor, c.title FROM courses as c INNER JOIN users as u INNER JOIN usercourse as uc WHERE uc.id\_user=u.id and uc.id\_course=c.id order By u.id;

Soal B

1. 127.0.0.1:8000/user, 127.0.0.1:8000/course, 127.0.0.1:8000/userCourse
2. 127.0.0.1:8000/authentifikasi