

# User-defined Variables

# What are User-defined variables?

- You can store a value in a user-defined variable in one statement and then refer to it later in another statement
  - > This enables you to pass values from one statement to another
- User-defined variables are connection-specific
  - > A user variable defined by one client cannot be seen or used by other clients
  - > All variables for a given client connection are automatically freed when that client exits

# How to create user-defined variables

- User variables are written as `@var_name`
- One way to set a user-defined variable is by issuing a SET statement:
  - > SET @var\_name = expr [, @var\_name = expr] ...
  - > For SET, either = or := can be used as the assignment operator
- Another way to define a user-defined variable is by using SELECT.. INTO
  - > SELECT .. INTO @var\_name

# Setting User-defined Variables with SET

```
mysql> SET @my_var1 = 10, @my_var2 := 20;  
Query OK, 0 rows affected (0.24 sec)
```

```
mysql> SELECT @my_var1, @my_var2, @my_var3 := @my_var1 + @my_var2;
```

@my_var1	@my_var2	@my_var3 := @my_var1 + @my_var2
10	20	30

```
1 row in set (0.05 sec)
```

```
mysql> SET @my_string_var = 'Sang Shin';  
Query OK, 0 rows affected (0.00 sec)
```

```
mysql> SELECT UPPER(@my_string_var), LOWER(@my_string_var);
```

UPPER(@my_string_var)	LOWER(@my_string_var)
SANG SHIN	sang shin

```
1 row in set (0.08 sec)
```

# Setting User-defined Variables with SELECT

```
mysql> SELECT 67 INTO @my_var4;
```

```
Query OK, 1 row affected (0.06 sec)
```

```
mysql> SELECT @my_var4;
```

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

```
| @my_var4 |
```

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

```
|    67 |
```

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

```
1 row in set (0.00 sec)
```

```
mysql> SELECT @my_var4 + 10 INTO @my_var5;
```

```
Query OK, 1 row affected (0.00 sec)
```

```
mysql> SELECT @my_var4, @my_var5;
```

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

```
| @my_var4 | @my_var5 |
```

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

```
|    67 |    77 |
```

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

```
1 row in set (0.00 sec)
```

# Setting User-defined Variables with SELECT

```
mysql> select name into @first from employees where employee_id =1;  
Query OK, 1 row affected (0.00 sec)
```

```
mysql> select @first;
```

```
+-----+  
| @first |  
+-----+  
| jack  |  
+-----+
```

```
1 row in set (0.00 sec)
```

```
mysql> select sum(salary) from employees into @total;  
Query OK, 1 row affected (0.00 sec)
```

```
mysql> select @total;
```

```
+-----+  
| @total |  
+-----+  
| 19500.00 |  
+-----+
```

```
1 row in set (0.00 sec)
```

# Lab:

## Exercise 5: User Defined Variables 1611\_mysql\_basics2.zip





**Code with Passion!**

