

# Creating Your First Stored Procedure

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## Introduction



### What makes up a stored procedure?

- Helpful syntax
- Easy scripting
- Naming conventions

### Working with parameters

- Input and output

### Implementing best practices

- Design your own



# Exploring Basic Syntax

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```
CREATE PROCEDURE Sales.SelectSalesPerson  
AS  
SELECT FirstName, LastName FROM Sales.SalesPerson;  
GO
```

## Syntax for Creating Stored Procedures

**Executing more than once will generate an error**

**Don't start with the name sp\_**

```
CREATE OR ALTER PROCEDURE Sales.SelectSalesPerson  
AS  
BEGIN  
    SELECT FirstName, LastName FROM Sales.SalesPerson;  
END  
GO
```

Syntax to Create or Alter

**No longer need to check if the stored procedure exists**

**Only works on SQL Server version 2016 and beyond**

```
EXECUTE Sales.SelectSalesPerson;
```

```
GO
```

```
EXEC Sales.SelectSalesPerson;
```

```
GO
```

## Executing Stored Procedures

**Make sure to include the schema name**



## Debate over naming objects

- Don't start with sp\_

Popular to use usp\_ as the prefix

Typically naming is verb then noun

- UpdateCustomer

Sometimes you will see primary table as prefix

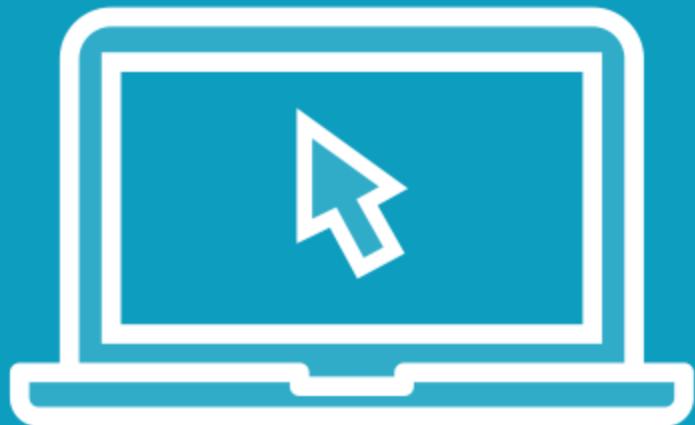
- SalesPerson\_InsertPerson



Pick a naming standard and be  
consistent with using it.



## Demo



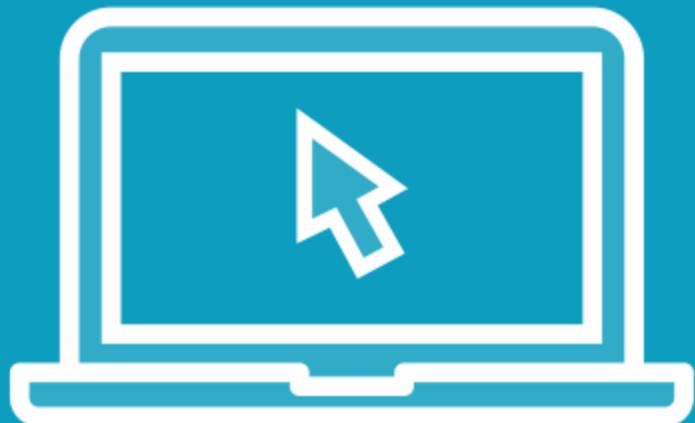
### **Creating your first stored procedure**

- Selecting a salesperson

### **Executing your stored procedure**



# Demo



## Scripting your stored procedure

- Required parameters



# Working with Parameters

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## Instruction passed to stored procedure

- Multiple values
- 2100 parameter limit

## Input and output

- Pass between
- Determine success

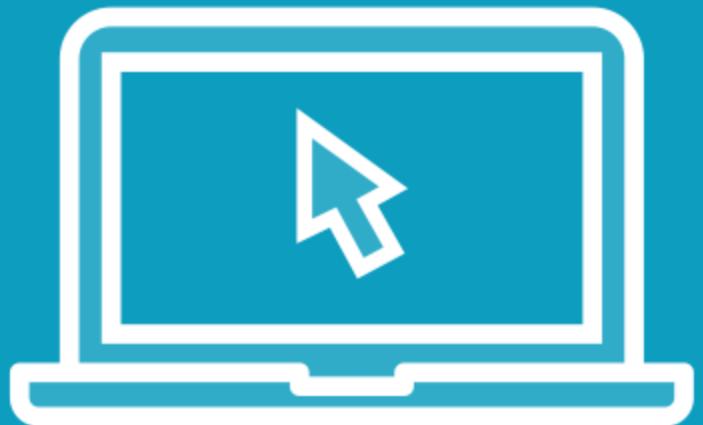
## Local variables for input

## Name them properly

- Skip @parameter1 or @a



# Demo



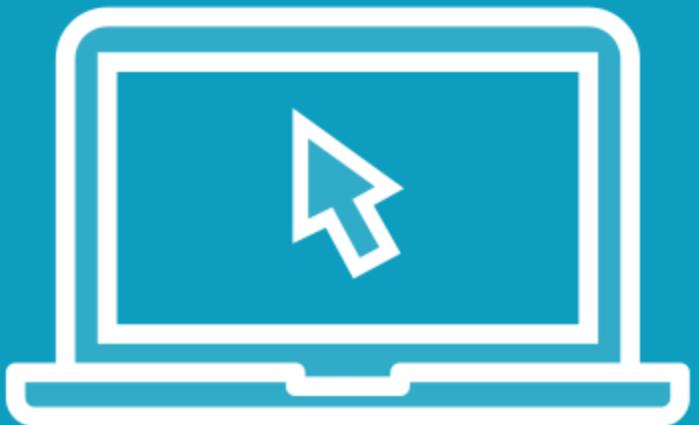
## Passing in parameters

- Default value

## Returning a single value



Demo



**Finding table dependencies**



# Exploring Best Practices

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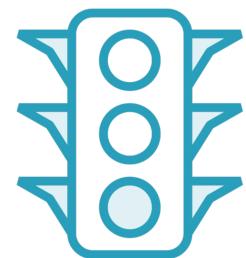


“Adapt what is useful, reject what is useless, and add what is specifically your own.”

**Bruce Lee**



# Common Best Practices



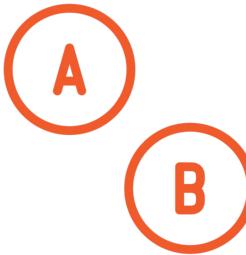
**Set nocount on: reduces network traffic**



**Sp\_ prefix: reserved for system procedures**



**Schema name: without schema master db is checked first**



**Avoid using cursors: SQL Server is optimized for sets**



**Action name: easily identify the procedure's purpose**



## Summary



**Created your first stored procedure**

**Lose permissions when dropping**

**Added parameters**

- Instructions

**Reviewed common best practices**

**Make them your own**



Up Next:  
Setting up Queries in Stored Procedures

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