# Week 13 Lab 1 Practical

# Duties of a DBA - Backup and Restore

**Completing this worksheet will help prepare you for the next mini assessment. This is a checkpoint, you may work in pairs.**

1. **What are some common tasks a DBA can be expected to complete? For each also list how often they should occur**

**Backup**

1. **How would you automate your production backups?**

**Create scheduled tasks and scripts.**

1. **How would you check your backups to validate that they were successfully created?**
2. **List the three backup models in SQL Server and the associated pros and cons.**

**File**

* **Pros: Individual files and small**
* **Cons: Can get quite complex**

**Transaction log**

* **Pros: Not truncated**
* **Cons: If log is damaged work that is performed since previous backup is lost**

**Differential**

* **Pros: Quick and small**
* **Cons: More steps and more time to back up. Two Backup files are required**

1. **List the two ways these backup models can be set (include any syntax)**

**Let have a quick run through. Files on the I: drive and in Gitlab.**

**Install the Pubs database on your containerised MSSQL Server (installpubs.sql).**

**Take a full backup of your Pubs database (make sure you have closed any query windows).**

**Insert the Pubs data.**

**Take a differential backup.**

**Insert a new author <YourName> (or update an existing author).**

**Take a differential backup.**

**Restore the full backup only (explore the Options and the Timeline)**

**Verify there is no data.**

**Restore the full backup + differential + transactions logs.**

**Confirm your data is in its most recent state.**

**DBCC CHECKDB for allocation or consistency errors.**