Database Administration Assignment

1. A user can get added to the server or use a guest account if enabled
2. To add a user to the SQL server you use the syntax *CREATE USER,* thiscommand will let you create the user. The user will have permissions set by a sysadmin.
3. The fixed server roles available at server level are;

* **Sysadmin** who is able to have full control of the database and can do anything within the SQL Server.
* **Dbcreator** is a role which allows for the creation of databases and to alter databases
* **Bulkadmin** lets you use the bulk insert feature to take data out of external files and into the database tables
* **Processadmin** is a role where you can alter connections to the SQL server
* **Serveradmin** is a role where the you can alter the configuration to the server
* **Setupadmin** is a role where you can alter linked servers
* **Securityadmin** lets you manage logins through granting and revoking access
* **Public** lets you view any database

1. The fixed database roles available are;

* **Db\_owner** is someone who can perform all configuration activities. Just the dbo can can deny the Db\_owner
* **Db\_datareader** read data from all user tables with access to select
* **Db\_datawriter** lets you insert, update and delete data
* **Db\_backupoperator** Lets you back up data

1. In SQL a number of backups can be performed

* **A full database backup** can be performed which backups all of the database files and writes all the data pages to the disk
* **Incremental backup** backs up all the changes since the last incremental backup and works along side the full database backup to add any new data to the existing back up
* **Differential Backups** the data that has changed since the last full database backup
* **File/Filegroup backup** Lets you backup each file independently and file group lets you back up all the files that are in a particular filegroup
* **Tail-log backup** capture any log that has not been yet backed up to prevent work loss
* **Partial Backup** lets you back up the PRIMARY file group, all Read-Write filegroups will be back up

1. With the complete database restore you can also use;

**A partial restore** this will let you restore part of the database

**A File restore** which will let you restore certain file or file groups to the database

**A page restore** which will let you restore certain pages