Georges Youssef - 103070491 COS20015 – FUNDAMENTALS OF DATA MANAGEMENT

Pass Task 3.1.4

Movie Rental

Item_No	M_Type	Borrowed_Date	M_Title	Client_NO	Client_Name	Return_Date
44-01	DVD	10-June	Fantastic Four	123	Terry Smith	11-June
44-01	DVD	12-May	Fantastic Four	567	Lucy Lee	
48-01	DVD	10-May	Minions	123	Terry Smith	12 May
44-01	DVD	12-May	Fantastic Four	123	Terry Smith	

a) Which **string data type** is best to be used in the declaration of the column "Title"? Why?

The Varchar data type would work best for the Title column. This is because Varchar consumes less space than char in most circumstances. This is useful as it helps in reducing the size of large databases, however it can result in fragmentation issues if the varchar value was to change.

b) Choose a primary key

There is no good choice for a primary key. Instead it is best to use a composite key containing; Item_NO+Borrowed_Date+Client_NO

Although it adds complexity it also allows to enforce a common kind of constraint in a simple and powerful way