Session Title: **VIEWS, STORED PROCEDURES & FUNCTIONS, TRIGGERS, EVENTS**

Session No: 6

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| **Learning Objectives:**   1. Learn about Views and how to use them 2. Stored Procedures (SP), understand their importance and learn the syntax to write a SP. 3. Triggers, learn how to create and use them 4. Event, learn how to create and use them |

Session Outline

Please do not change the intro and closing blocks - feel free to add more session blocks as you see fit.

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| **Intro & Framing** Time: 5 mins  What will today’s session be about, what will they be able to do at the end and how will they learn today? |

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| **Session Block Title #1 VIEWS**  The syntax for creating a View is not complicated. Our main objective for this part is to explain and demonstrate the usefulness of Views and their application. Use the diagram to talk through the process of creating a view and to explain why it is a ‘virtual table’.  It would be good is you have time to give a couple of ‘data security’ examples to explain advantages of views.  There is also a slide on View restrictions vs a normal table. Explain the difference to students, but if they find it a little tricky, don’t worry – you will have a chance to explain it again whilst doing a practical exercise. |
| Relevant Exercise(s):  In the module6\_questions\_questions paper you will find names of relevant sql scripts that need to be used.  At first, show students how to create a view. Feel free to alter the ‘staff’ table as required if you want to change the examples slightly.  The second part of the exercise would be to demonstrate how to update a table through a view and how to use WITH CHECK option. |

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| **Session Block Title #2 STORED PROCEDURES (SP) and STORED FUNCTIONS (SF)**  A very important section to introduce SP and SF, you may choose to allocate a little bit more time to focus on this chapter. The most important task is to explain the difference between SF and SP. Explain their roles and where they are positioned in the DB, as well as their use. |
| Relevant Exercise(s):  Complete exercises as explained on the ‘PRACTICE ’ slides. See code examples and answers:  **Session Plans / DB\_week6/in-class exercises and demo/module6\_questions\_answers**  Focus on SP & SF syntax and complete relevant exercises. Remember that SF and SP might be very complicated, so we try to show only simple examples, so the students are comfortable creating and using these new projects. And feel free to add any other examples if time allows. |

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| **Session Block Title #3 TRIGGES**  **Session Block Title #4 EVENTS**  The objective is to teach students what Triggers and Events are and how they can be used. From personal experience, students may struggle to understand how to use these objects at first, but it becomes much easier once you have completed exercises together. |

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| **Recap & Closing** Time: 10 mins  How can you get the learners to articulate what they learned today, celebrate what they achieved and inform them what they need to do as homework? |