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Database Assignment 6

10.7

The two main purposes of data modeling are to assist in the understanding of the meaning of the data and to facilitate communication about the information requirements. Data models should have structural validity, simplicity, expressibility, nonredundancy, shareability, extensibility, integrity, and diagrammatic representation.

12.1

Entity types represent objects with independent existences but similar properties. Examples of physical entities would be customers or products, while examples of conceptual entities would be sales or work experience.

12.11 \*

//The main entity types for the company are instructors, trainees, courses, teams, assignments, //and completion. This can be broken down into two groups: people and tasks.

14.15

B-Trees

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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| P | 25 | P | 50 | P | 75 | P |  | P |

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| 5 | 10 | 15 | 20 | / | 25 | 28 | 30 |  | / | 50 | 55 | 60 | 65 | / | 75 | 80 | 85 | 90 |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| P | 25 | P | 50 | P | 75 | P |  | P |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 5 | 10 | 15 | 20 | / | 25 | 28 | 29 | 30 | / | 50 | 55 | 60 | 65 | / | 75 | 80 | 85 | 90 |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| P | 20 | P | 30 | P | 65 | P |  | P |

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| 3 | 5 | 10 | 15 | / | 20 | 25 | 28 | 29 | / | 30 | 50 | 55 | 60 | / | 65 | 75 | 80 | 85 |

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| P | 5 | P | 20 | P | 30 | P | 65 | P |

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| 3 | 4 | / | 5 | 10 | 15 | / | 20 | 25 | 28 | 29 | / | 30 | 50 | 55 | 60 | / | 65 | 75 | 80 | 85 |

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| P | 25 | P | 50 | P | 75 | P |  | P |

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| 5 | 10 | 15 | 20 | / | 25 | 30 |  |  | / | 50 | 55 | 60 | 65 | / | 75 | 80 | 85 | 90 |

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| P | 25 | P | 55 | P | 75 | P |  | P |

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| 5 | 10 | 15 | 20 | / | 25 | 50 |  |  | / | 55 | 60 | 65 |  | / | 75 | 80 | 85 | 90 |

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7 \* 80 = 560