**2024-2025 Fall, Department of Computer Engineering**

**CBU4406 Job Safety and Workers’ Health-II**

**HOMEWORK**

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| **Presentation Date** | **31.10.2024** |
| **Student Id** | 220315086 |
| **Name Surname** | Batın Taha Önal |
| **Question ID** | 22 |
| **Question** | Examine the causality of an accident in the domino model. Please specify an accident title. |
| **Answer**  **Accident Title: Chemical Plant Explosion**  **1. Lack of Control**   * There was insufficient oversight and risk management. Safety protocols for handling hazardous chemicals were either not enforced or poorly implemented.   **2. Unsafe Conditions**   * Poor maintenance led to faulty equipment in the plant. There were leaks in the chemical storage tanks, and the ventilation system was inadequate for the volume of chemicals handled daily.   **3. Unsafe Acts**   * An operator incorrectly mixed two incompatible chemicals due to a lack of proper labeling and rushed procedures.   **4. Accident**   * The chemical mixture led to a rapid, exothermic reaction, causing high pressure to build up in the storage tank, resulting in an explosion.   **5. Injury or Damage**   * Several workers were injured by the explosion, and the plant infrastructure suffered significant damage. | |