**1. Users Table:**

| id | username | email | password |

|----|------------|------------------|-----------------|

| 1 | john\_doe | john@example.com | hashed\_password |

| 2 | jane\_smith | jane@example.com | hashed\_password |

**2. Courses Table:**

| id | title | description | instructor | duration | prerequisites |

|----|-------------------------------|---------------------------------------|--------------|----------|------------------------|

| 1 | Introduction to Python | Learn the fundamentals of Python | Jane Smith | 8 weeks | Basic computer literacy |

| 2 | Web Development Fundamentals | Introduction to web development | John Doe | 6 weeks | None |

**3. Enrollments Table:**

| id | user\_id | course\_id | enrollment\_status | payment\_status |

|----|---------|-----------|-------------------|----------------|

| 1 | 1 | 1 | Enrolled | Paid |

| 2 | 2 | 2 | Enrolled | Unpaid |

**4. Materials Table:**

| id | course\_id | type | title | content |

|----|-----------|---------------|--------------------------|-----------------------|

| 1 | 1 | Video Lecture | Introduction to Python | URL to video lecture |

| 2 | 2 | Reading | HTML Basics | URL to reading material |

**5. Progress Table:**

| id | user\_id | course\_id | lecture\_completed | quiz\_completed | assignment\_completed |

|----|---------|-----------|-------------------|----------------|-----------------------|

| 1 | 1 | 1 | 4 | 2 | 1 |

| 2 | 2 | 2 | 2 | 0 | 0 |

**6. Messages Table:**

| id | user\_id | course\_id | message\_content |

|----|---------|-----------|----------------------------------|

| 1 | 1 | 1 | Question about Python assignment |

| 2 | 2 | 2 | Need clarification on HTML topic |

**7. Certificates Table:**

| id | user\_id | course\_id | certificate\_title | certificate\_url |

|----|---------|-----------|-------------------------|------------------------|

| 1 | 1 | 1 | Certificate of Completion | URL to download PDF |

| 2 | 2 | 2 | Certificate of Completion | URL to download PDF |

**8. Profile Table:**

| id | user\_id | full\_name | date\_of\_birth | bio |

|----|---------|-----------|---------------|-----------------------------------------------|

| 1 | 1 | John Doe | 1990-05-15 | A passionate learner interested in programming |

| 2 | 2 | Jane Smith| 1995-09-20 | Aspiring web developer and lifelong learner |