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| **SCHOOL OF COMPUTER SCIENCE AND ARTIFICIAL INTELLIGENCE** | | | | | **DEPARTMENT OF COMPUTER SCIENCE ENGINEERING** | | | | |
| **Program Name:** B. Tech | | | | **Assignment Type: Lab** | | | **Academic Year:**2025-2026 | | |
| **Course Coordinator Name** | | | | Dr. Rishabh Mittal | | | | | |
| **Instructor(s) Name** | | | | |  | | --- | | Mr. S Naresh Kumar | | Ms. B. Swathi | | Dr. Sasanko Shekhar Gantayat | | Mr. Md Sallauddin | | Dr. Mathivanan | | Mr. Y Srikanth | | Ms. N Shilpa | | Dr. Rishabh Mittal (Coordinator) | | Dr. R. Prashant Kumar | | Mr. Ankushavali MD | | Mr. B Viswanath | | Ms. Sujitha Reddy | | Ms. A. Anitha | | Ms. M.Madhuri | | Ms. Katherashala Swetha | | Ms. Velpula sumalatha | | Mr. Bingi Raju | | | | | | |
| **CourseCode** | | | 23CS002PC304 | **Course Title** | | AI Assisted Coding | | | |
| **Year/Sem** | | | III/II | **Regulation** | | R23 | | | |
| **Date and Day**  **of Assignment** | | | **Week3 – Friday** | **Time(s)** | | 23CSBTB01 To 23CSBTB52 | | | |
| **Duration** | | | 2 Hours | **Applicable to**  **Batches** | | All batches | | | |
| **Assignment Number: 6.5**(Present assignment number)/**24**(Total number of assignments) | | | | | | | | | |
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|  | **Q.No.** | **Question** | | | | | | ***Expected Time***  ***to complete*** |  |
|  | 1 | **Experiment 6: AI-Based Code Completion: Working with suggestions for classes, loops, conditionals**  LO1. Use AI-based code completion tools to generate Python code involving classes, loops, and conditionals. LO2. Interpret and explain AI-generated code line-by-line. LO3. Identify errors, inefficiencies, or logical flaws in AI-suggested implementations. LO4. Optimize AI-generated code for better readability and performance. LO5. Demonstrate ethical and responsible use of AI tools in coding tasks.  Task Description #1 (AI-Based Code Completion for Conditional Eligibility Check)  Task: Use an AI tool to generate eligibility logic. Prompt: “Generate Python code to check voting eligibility based on age and citizenship.”  Expected Output:   * AI-generated conditional logic. * Correct eligibility decisions. * Explanation of conditions.   Task Description #2(AI-Based Code Completion for Loop-Based String Processing)  Task: Use an AI tool to process strings using loops. Prompt: “Generate Python code to count vowels and consonants in a string using a loop.”  Expected Output:   * AI-generated string processing logic. * Correct counts. * Output verification.   Task Description #3 (AI-Assisted Code Completion Reflection Task)  Task: Use an AI tool to generate a complete program using classes, loops, and conditionals. Prompt: “Generate a Python program for a library management system using classes, loops, and conditional statements.”  Expected Output:   * Complete AI-generated program. * Review of AI suggestions quality. * Short reflection on AI-assisted coding experience.   Task Description #4 (AI-Assisted Code Completion for Class-Based Attendance System)  Task: Use an AI tool to generate an attendance management class. Prompt: “Generate a Python class to mark and display student attendance using loops.”  Expected Output:   * AI-generated attendance logic. * Correct display of attendance. * Test cases.   Task Description #5 (AI-Based Code Completion for Conditional Menu Navigation)  Task: Use an AI tool to complete a navigation menu. Prompt: “Generate a Python program using loops and conditionals to simulate an ATM menu.”  Expected Output:   * AI-generated menu logic. * Correct option handling. * Output verification. | | | | | | Week3 -Friday |  |