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| **SL. NO** | **Experiment Name** | **Page** |
| 01 | Write a program to implement Huffman code using symbols with their corresponding probabilities. |  |
| 02 | Write a program to simulate convolutional coding based on their encoder structure. |  |
| 03 | Write a program to implement Lempel-Ziv code. |  |
| 04 | Write a program to implement Hamming code. |  |
| 05 | A binary symmetric channel has the following noise matrix with probability,    Now find the Channel Capacity C. |  |
| 06 | Write a program to check the optimality of Huffman code. |  |
| 07 | Write a code to find the entropy rate of a random walk on the following weighted graph |  |
| 08 | Write a program to find conditional entropy and join entropy and mutual information based on the following matrix.   |  |  |  |  |  | | --- | --- | --- | --- | --- | | X  Y | 1 | 2 | 3 | 4 | | 1 |  |  |  |  | | 2 |  |  |  |  | | 3 |  |  |  |  | | 4 |  | 0 | 0 | 0 | |  |

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