

Symbiosis Institute of Technology, Nagpur

Sub: GenAI

Sem: VII

CA – II (Assignment)

Marks: 15

Q:1 Generate a model in Python for representation of a bank account of type savings and balance along with transactions of deposit and withdrawals and currently create a program to generate 100 accounts with Random balance and transactions for no. of months and no. of transactions with a seed value of amount. Print all 100 accounts with the last balance and organize them by lowest to highest balance.

Q:2 Generate a model in Python to represent a Housing loan scheme and create a chart to display the Emi based on rate of interest and reducing balance for a given period. If a customer wishes to close the loan earlier, print the interest lost distributed over the remaining no. Of months. Assume suitable data and inputs as necessary.

Q:3 Generate a model for an Insurance company to hold information on the insurer's vehicle, and create a chart of monthly, yearly, and qtrly premiums based on no. of years of insurance where in each year, the value of the vehicle depreciates by 7%.

Q:4 Generate a model to represent interest calculations of a Bank account where the process of calculating interest for 6 months is a. Find minimum balance for each month b. Make a total of all minimum balances c. Calculate interest based on interest rate d. Divide interest by 12 to find one-month interest e. Multiply interest by 6 to show interest in the account. Generate a model to represent transactions and interest calculations for 6 months.

Q:5 Generate a model for Covid 19 with symptoms of parameters like fever, cold, shivering, weight loss, generate 100 model data with random values for each parameter and order by parameter lowest to highest in display based on the input parameter.

Q:6 Generate a model to represent a mathematical equation, write a program to parse the equation, and ask for input for each parameter.

Note:

- Attempt any two out of six questions.
- No handwritten content. Only typed content on an A4 sheet.
- Showcase output in each answer.
- Commit your assignment to GitHub in your repository and invite an industry expert (hkarkar) as a collaborator.
- Submission Deadline: Sep 16, 2024 (5 PM).