## Assignment List

| $\begin{gathered} S l . \\ \text { No. } \end{gathered}$ | Topic of Assignment | CO | PO and PSO mapping |
| :---: | :---: | :---: | :---: |
| 1. | Write a program to calculate Simple Interest of a principle amount, rate of interest and time as inputs. | $\begin{aligned} & \text { MCA } \\ & 193.1 \end{aligned}$ | $\begin{aligned} & \hline \mathrm{PO}_{1,} \quad \mathrm{PO}_{2}, \\ & \mathrm{PO}_{3}, \mathrm{PO}_{4} \\ & \mathrm{PSO}_{1}, \mathrm{PSO}_{2} \\ & \hline \end{aligned}$ |
| 2. | Write a program to calculate division of a student where Division 1: marks>=75\% Division 2: marks= 65\% Division 3: marks=50\% Failed: marks | $\begin{aligned} & \hline \text { MCA } \\ & 193.1 \end{aligned}$ | $\begin{aligned} & \begin{array}{l} \mathrm{PO}_{1,} \\ \mathrm{PO}_{3}, \mathrm{PO}_{4} \end{array} \mathrm{PO}_{2}, \\ & \mathrm{PSO}_{1}, \mathrm{PSO}_{2} \end{aligned}$ |
| 3. | Write a program to find the maximum of Three Integer. | $\begin{aligned} & \text { MCA } \\ & 193.1 \end{aligned}$ | $\begin{aligned} & \mathrm{PO}_{1,} \quad \mathrm{PO}_{2}, \\ & \mathrm{PO}_{3}, \mathrm{PO}_{4} \\ & \mathrm{PSO}_{1}, \mathrm{PSO}_{2} \\ & \hline \end{aligned}$ |
| 4. | Write a program to find the factorial of a number n (take input). | $\begin{aligned} & \hline \text { MCA } \\ & 193.1 \end{aligned}$ | $\begin{aligned} & \begin{array}{l} \mathrm{PO}_{1,}, \\ \mathrm{PO}_{3}, \mathrm{PO}_{4} \end{array} \\ & \mathrm{PO}_{2}, \\ & \mathrm{PSO}_{1}, \mathrm{PSO}_{2} \end{aligned}$ |


| 5. | Write a program to print the terms of Fibonacci series. Given $\mathrm{F} 1=0$, $\mathrm{F} 2=1$. | MCA $193.1$ | $\begin{aligned} & \mathrm{PO}_{1,} \quad \mathrm{PO}_{2}, \\ & \mathrm{PO}_{3}, \mathrm{PO}_{4} \\ & \mathrm{PSO}_{1}, \mathrm{PSO}_{2} \end{aligned}$ |
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| 6. | Write a program which will take a number as input prints it is prime or not. | $\begin{aligned} & \mathrm{MCA} \\ & 193.1 \end{aligned}$ | $\begin{aligned} & \begin{array}{l} \mathrm{PO}_{1,}, \\ \mathrm{PO}_{3}, \mathrm{PO}_{4} \end{array} \\ & \mathrm{PO}_{2}, \\ & \mathrm{PSO}_{1}, \mathrm{PSO}_{2} \end{aligned}$ |
| 7. | Write a program to reverse the digits of a number i.e. if input is 23456 , output should be 65432 . | $\begin{aligned} & \hline \mathrm{MCA} \\ & 193.1 \end{aligned}$ | $\begin{aligned} & \mathrm{PO}_{1,} \quad \mathrm{PO}_{2}, \\ & \mathrm{PO}_{3}, \mathrm{PO}_{4} \\ & \mathrm{PSO}_{1}, \mathrm{PSO}_{2} \end{aligned}$ |
| 8. | Write a program to find the HCF of two numbers. | MCA $193.1$ | $\begin{aligned} & \begin{array}{l} \mathrm{PO}_{1,}, \\ \mathrm{PO}_{3}, \mathrm{PO}_{4} \end{array} \\ & \mathrm{PO}_{2}, \\ & \mathrm{PSO}_{1}, \mathrm{PSO}_{2} \end{aligned}$ |
| 9. | Write a program which converts a binary number (input) to corresponding integer. | $\begin{aligned} & \text { MCA } \\ & 193.1 \end{aligned}$ | $\begin{aligned} & \mathrm{PO}_{1,} \quad \mathrm{PO}_{2}, \\ & \mathrm{PO}_{3}, \mathrm{PO}_{4} \\ & \mathrm{PSO}_{1}, \mathrm{PSO}_{2} \end{aligned}$ |
| 10. | Write a program to calculate the sum of the series: $S=1!+2!+\ldots+n!$ | $\begin{aligned} & \hline \text { MCA } \\ & 193.1 \end{aligned}$ | $\begin{aligned} & \mathrm{PO}_{1}, \quad \mathrm{PO}_{2}, \\ & \mathrm{PO}_{3}, \mathrm{PO}_{4} \end{aligned}$ |


|  |  |  | $\mathrm{PSO}_{1}, \mathrm{PSO}_{2}$ |
| :---: | :---: | :---: | :---: |
| 11. | Write a program to print the following pattern (Number of row is input): | $\begin{gathered} \text { MCA } \\ 193.1 \end{gathered}$ | $\begin{aligned} & \mathrm{PO}_{1}, \quad \mathrm{PO}_{2}, \\ & \mathrm{PO}_{3}, \mathrm{PO}_{4} \\ & \mathrm{PSO}_{1}, \mathrm{PSO}_{2} \end{aligned}$ |
| 12. | Write a program to print the following pattern (Number of row is input): $\begin{array}{r} 1 \\ 232 \\ 34543 \\ 4567654 \end{array}$ | $\begin{aligned} & \text { MCA } \\ & 193.1 \end{aligned}$ | $\begin{aligned} & \mathrm{PO}_{1}, \quad \mathrm{PO}_{2}, \\ & \mathrm{PO}_{3}, \mathrm{PO}_{4} \\ & \mathrm{PSO}_{1}, \mathrm{PSO}_{2} \end{aligned}$ |


| 13. | Write a program to create an array of n elements and then print maximum and minimum elements from that array. | $\begin{aligned} & \hline \text { MCA } \\ & 193.3 \end{aligned}$ | $\begin{aligned} & \hline \mathrm{PO}_{1,} \quad \mathrm{PO}_{2}, \\ & \mathrm{PO}_{3}, \mathrm{PO}_{4} \\ & \mathrm{PSO}_{1}, \mathrm{PSO}_{2} \\ & \hline \end{aligned}$ |
| :---: | :---: | :---: | :---: |
| 14. | Write a program to create a 2D array of integers print the minimum elements of each row. | $\begin{aligned} & \text { MCA } \\ & 193.3 \end{aligned}$ | $\begin{aligned} & \mathrm{PO}_{1}, \quad \mathrm{PO}_{2}, \\ & \mathrm{PO}_{3}, \mathrm{PO}_{4} \\ & \mathrm{PSO}_{1}, \mathrm{PSO}_{2} \\ & \hline \end{aligned}$ |
| 15. | Write a program to enter 2 matrices and add them in another matrix and print the resultant matrix. | $\begin{aligned} & \hline \text { MCA } \\ & 193.3 \end{aligned}$ | $\begin{aligned} & \mathrm{PO}_{1,} \quad \mathrm{PO}_{2}, \\ & \mathrm{PO}_{3}, \mathrm{PO}_{4} \\ & \mathrm{PSO}_{1}, \mathrm{PSO}_{2} \\ & \hline \end{aligned}$ |
| 16. | Write a program to input a string and check whether the string is palindrome or not without reversing the string. | $\begin{aligned} & \hline \text { MCA } \\ & 193.2 \end{aligned}$ | $\begin{aligned} & \mathrm{PO}_{1,} \quad \mathrm{PO}_{2}, \\ & \mathrm{PO}_{3}, \mathrm{PO}_{4} \\ & \mathrm{PSO}_{1}, \mathrm{PSO}_{2} \end{aligned}$ |
| 17. | Write a program to find factorial value of any input through the keyboard Use function to calculate factorial. | $\begin{aligned} & \text { MCA } \\ & 193.2 \end{aligned}$ | $\begin{aligned} & \mathrm{PO}_{1,} \quad \mathrm{PO}_{2}, \\ & \mathrm{PO}_{3}, \mathrm{PO}_{4} \\ & \mathrm{PSO}_{1}, \mathrm{PSO}_{2} \\ & \hline \end{aligned}$ |
| 18. | Write a program to find factorial using recursion. | $\begin{aligned} & \text { MCA } \\ & 193.2 \end{aligned}$ | $\begin{aligned} & \mathrm{PO}_{1,} \quad \mathrm{PO}_{2}, \\ & \mathrm{PO}_{3}, \mathrm{PO}_{4} \\ & \mathrm{PSO}_{1}, \mathrm{PSO}_{2} \\ & \hline \end{aligned}$ |


| 19. | Write a program which will create a structure of students with following information name, rollno, stream, year, and phone. Create a list of students. Show the details of a student with any of the following information provided by user: i) name ii) phone_no | $\begin{aligned} & \hline \text { MCA } \\ & 193.3 \end{aligned}$ | $\begin{aligned} & \mathrm{PO}_{1,} \quad \mathrm{PO}_{2}, \\ & \mathrm{PO}_{3}, \mathrm{PO}_{4} \\ & \mathrm{PSO}_{1}, \mathrm{PSO}_{2} \end{aligned}$ |
| :---: | :---: | :---: | :---: |
| 20. | Create a structure for STUDENT with following members (sno ,sname ,sub1 ,sub2, sub3, total, percentage). Enter 10 students' details. Print the student details who has highest and lowest percentage. | $\begin{aligned} & \text { MCA } \\ & 193.3 \end{aligned}$ | $\begin{aligned} & \mathrm{PO}_{1,} \quad \mathrm{PO}_{2}, \\ & \mathrm{PO}_{3}, \mathrm{PO}_{4} \\ & \mathrm{PSO}_{1}, \mathrm{PSO}_{2} \\ & \hline \end{aligned}$ |
| 21. | Write a program to create a file and display the content of the file. | $\begin{aligned} & \hline \text { MCA } \\ & 193.4 \end{aligned}$ | $\begin{aligned} & \mathrm{PO}_{1,} \quad \mathrm{PO}_{2}, \\ & \mathrm{PO}_{3}, \mathrm{PO}_{4} \\ & \mathrm{PSO}_{1}, \mathrm{PSO}_{2} \end{aligned}$ |

