1. If $f(x)=3x^5-x^3+2x-5$, then Write a MATLAB code to find the value of $f(4)$ and execute.

2. Write a MATLAB code to find the solution of $x^2-x-6=0$ and execute.

3. Write a MATLAB code to find the following and execute.

   (i) $\cos\frac{\pi}{3}$ (ii) $\sqrt{37}$ (iii) $\tan^{-1}(1)$ (iv) $\log_{10}2$ (v) e^3

4. Write a MATLAB code to find the following and execute.

   (i) $\lim_{x\to 2}\left(\frac{3x^2-5x+7}{x+1}\right)$ (ii) $\lim_{x\to\infty}\left(\frac{5x^2-3x+1}{2x^2-1}\right)$

5. If $f(x)=6x^3-5x^2+8x+4$, then Write a MATLAB code to find the following and execute.

   (i) $f'(x)$

   (ii) $f''(x)$

6. Write a MATLAB code for plotting e^x, x^2 and x^2+1 in the interval $[0, 10]$ to display in the same window in different locations and execute it.