

LAB 4

AIM: 8087 programs using 8086 and 8087 instruction set

1. Compute x^y . x and y can be integer or real.
2. Compute $P \times (1 + \frac{r}{100})^n$. Example: P = 500.0, r = 12% and n = 4.0
3. Compute roots of quadratic equation. If roots are imaginary display message "Roots are imaginary".

Example: $x^2 - 7x + 10 = 0$

Roots are: (5, 2)

4. Compute $\sec(x)$, $\operatorname{cosec}(x)$ and $\cot(x)$.

New 8087 Instructions for this lab:

1. FSTSW: Store status word for checking different exceptional conditions.
2. FCHS: Change the sign of top of stack.