PRACTICAL 1

```
// Mayank
// 8562
// 22025558001
// Program to determine the phasor of forward propagating field
// Clear workspace and console
clc; clear;
// Input parameters
disp("Enter the parameters for the forward propagating field:");
amplitude = input("Amplitude (A): ");
frequency = input("Frequency (f in Hz): ");
phase = input("Phase (ϕ in degrees): ");
time = input("Time (t in seconds): ");

// Convert phase from degrees to radians
phase_rad = phase * (%pi / 180);

// Compute the angular frequency (ω)
omega = 2 * %pi * frequency;

// Compute the phasor representation
phasor = amplitude * exp(%i * (omega * time + phase_rad));

// Display the result
disp("The phasor of the forward propagating field is:");
disp(phasor);
```

OUTPUT:

```
  "Enter the parameters for the forward propagating field:"
Amplitude (A): 5

Frequency (f in Hz): 50

Phase (ϕ in degrees): 30

Time (t in seconds): 0.02
"The phasor of the forward propagating field is:"
   4.330127 + 2.5i
```