

- 1- The maximum range  $R_{max}$  in FMCW radar system increases when:
  - A) The sweep slope  $S$  increases
  - B) The maximum intermediate frequency  $f_{IF\_max}$  decreases
  - C) The radar sweep slope  $S$  decreases
  - D) The pulse repetition frequency increases.
  
- 2- To improve range resolution  $\Delta R$  in FMCW radar, the system should:
  - A) Increase the chirp duration  $T_c$
  - B) Increase the transmit signal bandwidth  $B$
  - C) Decrease the sweep slope  $S$
  - D) Increase the operating frequency  $f_c$