Exercise problems from Lecture 19:

Q1. Match the following compounds with their correct values.

CH ₃ CH ₂ Br	$\delta = 4.30 \text{ ppm}$
CH_3CH_2I	$\delta = 3.05 \text{ ppm}$
CH ₃ CH ₂ Cl	$\delta = 2.10 \text{ ppm}$
CH_3CH_2F	$\delta = 2.70 \text{ ppm}$

2. Complete the following table

Compound	No of ¹ H-NMR signals	Label the most shielded and deshielded protons
ÇH₃		Sinciaca protons
NO		
H		
O_2N O_2 O_2 O_3 O_3 O_4		

Q3. Why terminal alkyne (SP) proton in more shielded than alkene protons (SP²)?

Q4. Complete the following table

Compound	No of ¹ H-NMR signals	Wtite the multiplicity of peaks (singlet, doublet, triplet etc.)
0 H ₃ C O CH ₃		
O OCH₃		