FELs using Storage Rings, M.E. COUPRIE, SPAM/LURE - Present and expected performances (coherence properties in particular) of Storage Ring Free Electron Lasers (SRFELs) will be compared with usual synchrotron radiation from insertion devices, conventional lasers, harmonic generation or LINAC driven Self Amplified Spontaneous Emission sources. Prospects for short wavelength operation will be given, in the oscillator mode or using an alternative scheme provided by the FEL-induced coherent harmonics in the undulator. Design of a SRFEL on a specific ring (such as NIJI-4, DUKE or DELTA) or in compatibility with Synchrotron Radiation (such as Super-ACO, UVSOR) will be discussed, considering issues such as lattice optimization, beam-time flexibility, pump-probe user experiments coupling FEL and synchrotron radiation, both tunable, polarized, pulse-to-pulse naturally synchronized, as successfully demonstrated on Super-ACO. SRFELs will be replaced in the frame of the developments for the 4th generation of sources.