For example, $G = \mathbb{Z}^5 \oplus$ Torsion group.
Let H be a subgr of G.
$\Rightarrow$ The free part of H has rank less than 5 or equal to 5. Suppose not. $\Rightarrow \exists$ at least 6 vectors $v_1, \cdots v_6 \in \mathbb{Z}^5$, which are lineaf indep-
$\Rightarrow$ Consider $v_1 \cdots v_6 \in Q^5$.
$\Rightarrow \exists \quad q_1 v_1 + \cdots + q_6 v_6 = 0, \quad q_1 \cdots q_6 \in Q$
$\Rightarrow \exists \quad n_1 v_1 + \cdots + n_6 v_6 = 0, \quad$ not all n_i zero.
$\Rightarrow$ Contradiction.
$\Rightarrow \quad H/F \quad$ is finitely generated, where F is the free part of H.
$\Rightarrow \quad 0 \longrightarrow F \longrightarrow H \longrightarrow H/F \longrightarrow 0$
$\Rightarrow$ H is finitely generated. ∎

We have not dwelt on rational and algebraic equiv alence of divisors or of general algebraic cycles, partly because we do not need these for our study of any specific varieties, and partly because the codimension-one theory is - at least as matters now stand - misleading as regards higher codimension cycles.

The Leray Spectral Sequence

This is in many ways the most useful general spectral sequence, and so we want at least to say what it is and give an illustration. Suppose we