Algebraic Topology   **Exercise Sheet 1**

Prof. Dr. Alessandro Sisto

Assistant: Davide Spriano

Question 1:

Let X be a topological space, and suppose $X = \sqcup_{i \in I} X_i$, where each X_i is a path-connected component. Show that $H_n(X) = \bigoplus_{i \in I} H_n(X_i)$.