# Project 1

### Project assigned on Jan 19

Project report due on Feb 10, 6:00 pm

## 1 Problem

Design a source code for an iid binary source that outputs a 0 with probability 0.95 and a 1 with probability 0.05. Calculate the expected length L per source bit.

#### 2 Submission

You will need to submit a report (1 page; 2 sides) including your source code and the calculations. Email any programs that you may have to write.

#### 3 Marks

Your marks out of 10 will be  $\frac{1-L}{1-h(0.95,0.05)} \times 10$  rounded to the nearest integer.