- Pre-course Materials
- Topic 1: Course Overview
- Topic 2: Lossless Source Coding: Hamming Codes
- Topic 3: The Frequency Domain
- Topic 4: Lossy Source Coding
- Topic 5: Filters and the Frequency Response
- Topic 6: The Discrete Fourier Transform
- Topic 7: Signal Transmission - Modulation
- Topic 8: Signal Transmission - Demodulation
- Topic 9: IQ

GENERIC MATLAB SANDBOX

Here is a blank script for you to build your own communication system. This is an optional task and will not be graded. You can try to call any functions introduced by previously expired lab tasks.

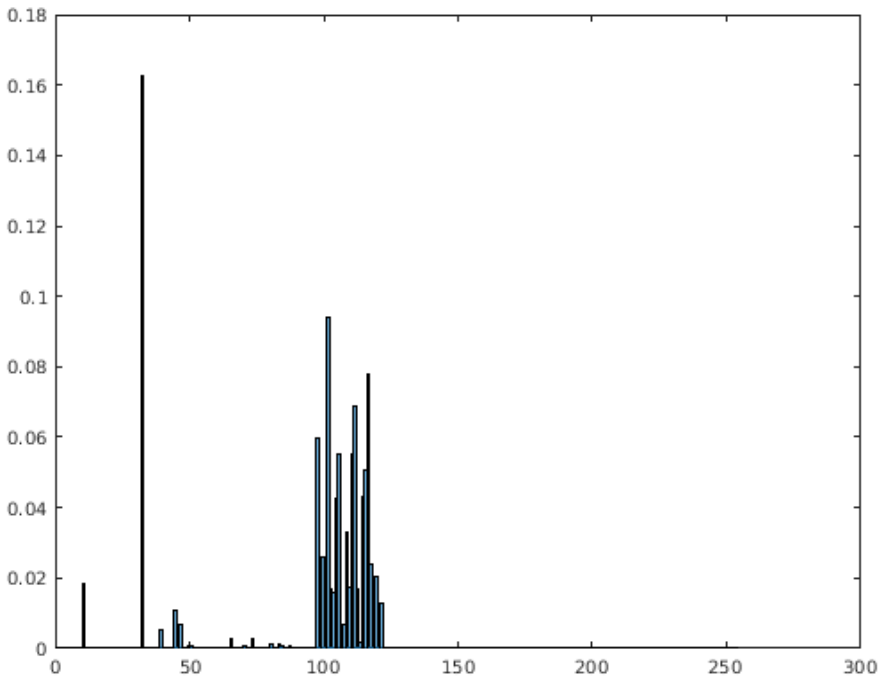
```
% read the text file (1 byte for each character)
fid = fopen('G4jHRdGpVaY.txt');
text_code = fread(fid,inf,'uchar');
fclose(fid);

% % % % Revise the following code % % % %
N =10;
% get the histogram
code_words =[0:1:255];
hist = histogram(text_code,code_words,'Normalization','probabili
prob = hist.Values;
% sort the histogram
[values, id_codes] = sort(prob, 'descend');

display(['Probability covered by the first ' num2str(N) ' charac
```

Correct

Figure 1



Modulation

▸ Topic 10: Summary and Review

▸ Final Exam

▸ MATLAB download and tutorials

▾ MATLAB Sandbox

MATLAB Sandbox

Lab 1 Sandbox

Lab 2 Sandbox

Lab 3 Sandbox

Lab 4 Sandbox

Lab 5 Sandbox

▸ Post Course Survey

```
Probability covered by the first 10 characters: 0.70886
Most likely characters: " etoanisrh"
Size of ASCII encoding: 79632
Size of Huffman encoding: 54648
The sent and the received messages are the same.
```

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