

```
clc
clear all
close all

prob = [0.5, 0.2, 0.2, 0.05, 0.05]; % Input probability array
codes = shannonFano(prob)
```

```
codes =
```

```
1x5 cell array
```

```
    {'0'}    {'10'}    {'110'}    {'1110'}    {'1111'}
```