## Lab 6 prelab

## Option 2: LED Level Meter

```
Input: heart_rate # in BPM, range 0 ~ 260
Output: IOD[7:0]
if (heart_rate < 70):</pre>
  IOD = 8'b10000000
else if (heart rate < 80):
  IOD = 8'b11000000
else if (heart_rate < 90):</pre>
  IOD = 8'b11100000
else if (heart_rate < 100):
  IOD = 8'b11110000
else if (heart_rate < 110):
  IOD = 8'b11111000
else if (heart_rate < 120):</pre>
  IOD = 8'b11111100
else if (heart_rate < 130):</pre>
  IOD = 8'b11111110
else:
  IOD = 8'b11111111
```

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