

### Assumptions:

- The readings that go into the input are valid.
  - The units that are inputted into the program are right
  - There are no external factors that is influencing the heart rhythm
- Solutions

### Verification:

$$\begin{array}{l} \text{BPS} = 120 \\ \text{BPD} = 63 \end{array} > \text{Normal}$$

$$\begin{array}{l} \text{BPS} = 130 \\ \text{BPD} = 90 \end{array} > \text{most severe}$$

$$\begin{array}{l} \text{BPS} = 53 \\ \text{BPD} = 59 \end{array} > \text{Hypotension}$$

$$\begin{array}{l} \text{BPS} = 0 \\ \text{BPD} = 0 \end{array} > \text{most severe}$$

$$\begin{array}{l} \text{BPS} = 91 \\ \text{BPD} = 63 \end{array} > \text{Normal}$$

$$\begin{array}{l} \text{BPS} = 210 \\ \text{BPD} = 219 \end{array} \text{Hypertension}$$

### Conclusion:

In this task we developed a program in lab view for blood pressure categorization for quickly assessing and categorize blood pressure readings.



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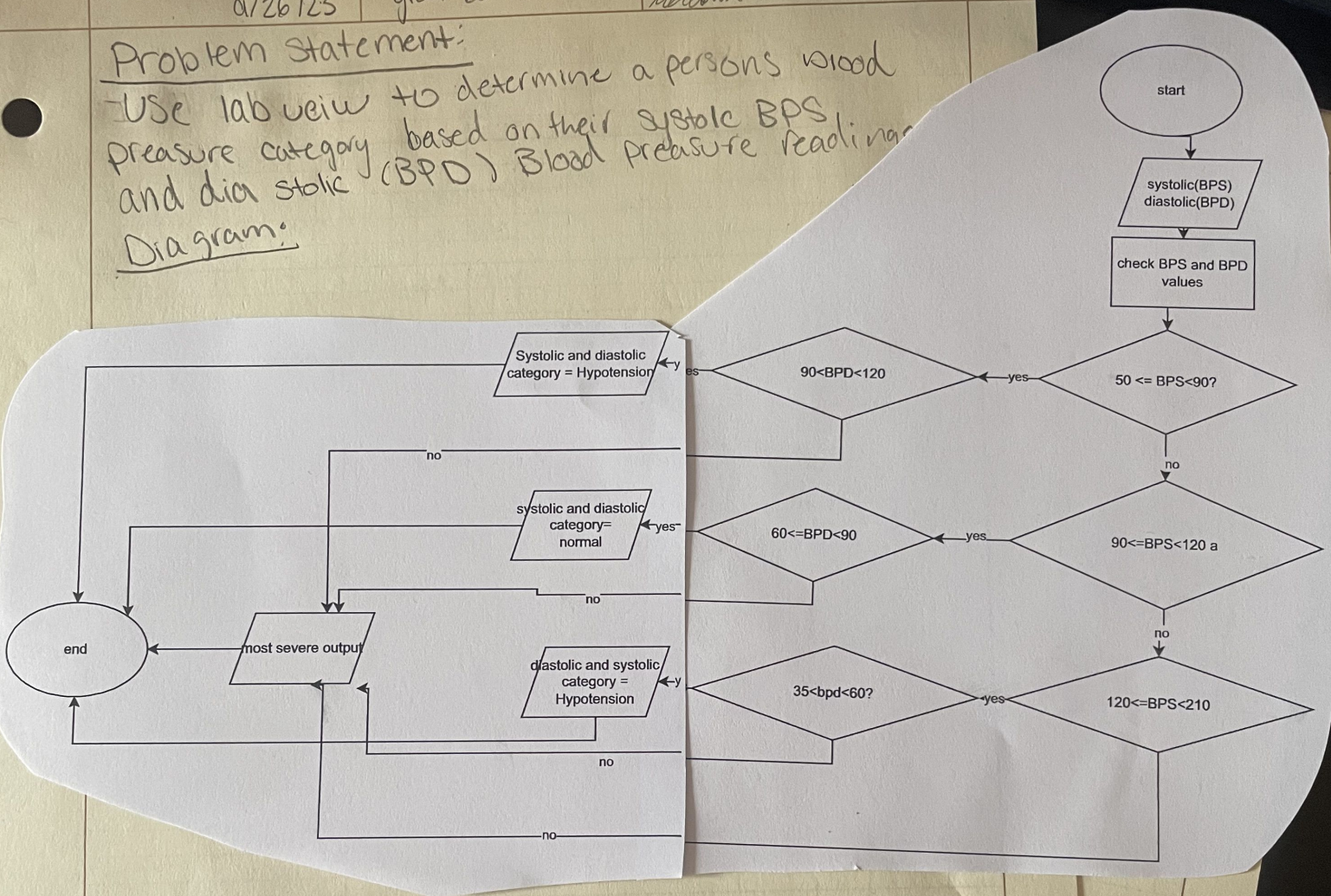
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## Problem Statement:

Use lab view to determine a persons blood pressure category based on their systolic BPS and diastolic (BPD) Blood Pressure Readings

## Diagram:



## Theory

Category	Systolic	Diastolic
Hypotension	$50 \leq \text{BPS} < 90$	$35 \leq \text{BPD} < 60$
Normal	$90 \leq \text{BPS} < 120$	$60 \leq \text{BPD} < 90$
Hypertension	$120 \leq \text{BPS} < 210$	$90 \leq \text{BPD} < 120$