**Input:**

Names:

Age:

Gender:

Blood test report containing:

**CBC:**

1. Hemoglobin 11-14.5 g/dL
2. Hematocrit 34.5-45.4%
3. Platelets 154-433%
4. RBC 3.61-5.2(\*10E12/L)
5. WBC 4.6-10.8(\*109/L)
6. MCV (78.1-95.3 fL)
7. MCH 25.3-31.7 pg
8. MCHC 30.3-34.4 g/dL
9. NEUTROPHILS 34.9-76.2%
10. LYMPHOCYTES 17.5-45%
11. EOSINOPHILS 0.3-7.4%
12. MONOCYTES 3.9-10%
13. BASOPHILS 0-1%

# BMP:

1. Calcium 8.6-10.3 mg/dL
2. Glucose 4-5.5 mmol/L
3. Sodium

Male 135-146mmol/L

Female 132-148 mmol/L

1. Potassium 3.5-5.0 mmol/L
2. Carbon dioxide 23-29 mEqL
3. Blood urea nitrogen (BUN) 7-20 mg/dL
4. Creatinine 0.84-1.21 Mg/dL

**VITAMINS:**

1. VITAMIN D

Deficiency <20

Insufficiency 21-29

Sufficiency >=30

Intoxication >150

1. VITAMIN B12

Low <200

normal 200-900

high >900