**PS Lab 08**

**IT24101069**

A computer screen shot of a computer

Description automatically generated

A screenshot of a computer

Description automatically generated

**A close up of a number

Description automatically generated**

**A close-up of a number

Description automatically generated**

**A white screen with black text

Description automatically generated**

**A white paper with blue text

Description automatically generated**

**A white background with black text

Description automatically generated**

**A white background with blue text

Description automatically generated**

**A screenshot of a computer

Description automatically generated**

**A white background with blue text

Description automatically generated**

**A close-up of a word

Description automatically generated**

**Exercise**

**A computer code with text

Description automatically generated with medium confidence**

**A computer code with black text

Description automatically generated**

1. Calculate the population mean and population standard deviation of the laptop bag weights.

A black text on a white background

Description automatically generated

A close-up of a computer code

Description automatically generated

1. Draw 25 random samples of size 6 (with replacement) and calculate the sample mean and sample standard deviation for each sample.

A screenshot of a computer code

Description automatically generated

A white background with blue text

Description automatically generated

A number and numbers on a white background

Description automatically generated

A number and numbers on a white background

Description automatically generated

1. Calculate the mean and standard deviation of the 25 sample means and state the relationship of them with true mean and true standard deviation.

A screenshot of a computer

Description automatically generated

A white background with blue text

Description automatically generated

A number and a mathematical equation

Description automatically generated with medium confidence