**Question. Construct 10 Hypothesis based on given Data**

1. The average age of employees that resign from the company is 36.

**Hypothesis:**

H0: μ = 36

H1: μ ≠ 36

**Test to be performed:**

Two-Tail Test, z-test (as std. deviation can be found out by the population data)

1. The average monthly income of females in the company is less than or equal to 65,000.

**Hypothesis:**

H0: μ <= 65,000

H1: μ > 65,000

**Test to be performed:**

One-tail Test - Right Tail Test

1. The average age of employees that travel rarely is less than or equal to 40.

**Hypothesis:**

H0: μ <= 40

H1: μ > 40

**Test to be performed:**

One-tail Test - Right Tail Test

1. The average “Percent Salary Hike” for employees in Research & Development Department is greater than or equal to 13.

**Hypothesis:**

H0: μ >= 13

H1: μ < 13

**Test to be performed:**

One-tail Test - Left Tail Test

1. The average “Distance from Home” of the employees that leave the company is more than 20.

**Hypothesis:**

H0: μ = 20

H1: μ ≠ 20

**Test to be performed:**

Two-Tail Test, z-test (as std. deviation can be found out by the population data)

1. The average “Training Times Last Year” for males is greater than or equal to 3.

**Hypothesis:**

H0: μ >= 3

H1: μ < 3

**Test to be performed:**

One-tail Test - Left Tail Test

1. The standard working hours for the employees with Medical Education field is 8.

**Hypothesis:**

H0: μ = 8

H1: μ ≠ 8

**Test to be performed:**

Two-Tail Test, z-test (as std. deviation can be found out by the population data)

1. The average "Num of Companies Worked" by the employees who left the company was more than or equal to 2.

**Hypothesis:**

H0: μ >= 2

H1: μ < 2

**Test to be performed:**

One-tail Test - Left Tail Test

1. The average “Years at Company” of males is equal to 5.

**Hypothesis:**

H0: μ = 5

H1: μ ≠ 5

**Test to be performed:**

Two-Tail Test, z-test (as std. deviation can be found out by the population data)

1. The average “Years Since Last Promotion” for the employees who left the company was more than or equal to 3.

**Hypothesis:**

H0: μ >= 3

H1: μ < 3

**Test to be performed:**

One-tail Test - Left Tail Test