

Temperature Conversions. The following problems generate temperature-conversion tables. Use the following equations that give relationships between temperatures in degrees Fahrenheit (T_F), degrees Celsius (T_C), degrees Kelvin (T_K), and degrees Rankin (T_R):

$$T_F = T_R - 459.67^\circ \text{ R}$$

$$T_F = (9/5)T_C + 32^\circ \text{ F}$$

$$T_R = (9/5)T_K$$

1. Write a program to generate a table of conversions from Fahrenheit to Celsius for values from 0°F to 100°F . Print a line in the table for each 5° change. Use a `while` loop in your solution.
2. Write a program to generate a table of conversions from Fahrenheit to Kelvin for values from 0°F to 200°F . Allow the user to enter the increment in degrees Fahrenheit between lines. Use a `do while` loop in your solution.
3. Write a program to generate a table of conversions from Celsius to Rankin. Allow the user to enter the starting temperature and increment between lines. Print 25 lines in the table. Use a `for` loop in your solution.