Variable List:

temp - float, stores user input for temperature

x0 - float, stores initial x value of interpolated equation

y0 - float, stores initial y value of interpolated equation

x1 - float, stores final x value of interpolated equation

y1 - float, stores final y value of interpolated equation

flux - float, stores the calculated flux value given the user input

Sequence of Steps:

Import log10 function from math module

Ask user to input excess temperature and assign to variable temp

If temp variable is less than 1.3 or greater than 1200, print a message saying calculation is not available and exit the program.

Else, if temp is less than or equal to 5, assign points A and B for (x0, y0) and (x1, y1) respectively.

Else, if temp is less than or equal to 30, assign points B and C for (x0, y0) and (x1, y1) respectively.

Else, if temp is less than or equal to 120, assign points C and D for (x0, y0) and (x1, y1) respectively.

Else, assign points D and E for (x0, y0) and (x1, y1) respectively

Calculate the flux variable using the equation flux = y0 * (temp / x0) ** (log10(y1 / y0) / log10(x1 / x0))

Print the final calculated and rounded flux value in a complete sentence

Test Cases:

	Input	Expected output	Case Type
1	0	Surface heat flux is not available	edge
2	1	Surface heat flux is not available	edge
3	9999	Surface heat flux is not available	edge
4	1201	Surface heat flux is not available	edge
5	2	The surface heat flux is approximately 1863 W/m^2	typical
6	3	The surface heat flux is approximately 3347 W/m^2	typical
7	20	The surface heat flux is approximately 445247 W/m^2	typical
8	25	The surface heat flux is approximately 868760 W/m^2	typical
9	121	The surface heat flux is approximately 25372 W/m^2	typical
10	1000	The surface heat flux is approximately 1084664 W/m^2	typical