POWER FUNCTION

The function **f(x,y) = x^y** is also called power function in the field of Mathematics. It refers to raising x to the power of y. Here, x is the base and y is the exponent to which x is raised to.

Domain:-

All real numbers.

Co-domain:-

All real numbers.

Characteristics of the function:-

- **If** y=0, then, f(x,y) = 1
- **If** y=1, then, f(x,y) = x
- The function is not a one to one function. For Example:- both **2^2** and **(-2)^2** evaluates to the same result **(4).**
- However, this function is an onto function.

REFERENCES:-

1. https://oregonstate.edu/instruct/mth251/cq/FieldGuide/power/lesson.html
2. https://docs.oracle.com/javase/7/docs/api/java/lang/Math.html#pow(double,%20double)