Mathematical Expression (ME):

- A ME is a combination of some operands and operators.
- An operand may be a value +ve or –ve or a variable.
- An operator may be a symbol representing a Mathematical Operation e.g. +, -, *, /, % (), ^ or ** for power

  A few examples of M.E.

  A + B

  24 - 5

  F * S

  A + (B / D)

Priority of Operators:

1. ( ) Highest Priority
2. ^
3. *, / and %
4. + and – Lowest / Least Priority

- For example
  2 + 3 * 4 = 2 + 12 = 14

  And

  (2+3) * 4 = 5 * 4 = 20

Construction of a Binary Tree from a Mathematical Expression

1. An Operator can be a Parent Node as well as a Child Node.
2. An Operand can **never** be a Parent Node. An operand is always a Leaf / terminal Node.
3. Always select an Operator of Least Priority.
4. In case of more than one operator with same priority, select the left-most one.
5. Properly **Underline** both the corresponding sides of the selected Operator.
6. Left Side of the selected Operator becomes the Left-Sub Tree
7. Right Side of the selected Operator becomes the Right-Sub Tree