Calculator Programming Example

In this MatDeck programming example, we illustrate how to create a simple calculator capable of adding, subtracting, multiplying and dividing by using the if-else statement. This program takes an arithmetic operator +, -, *, / and two operands from the user and performs the calculation on the two operands depending upon the operator entered by the user. In console mode, the user enters the first operand in the first line, then the operator in the second line, and second operand in the last line. After that, the program returns the result. In this example, console inputs and outputs are used, and because of that the document has to be executed in Build And Run Exe mode.

The calculator consists of two functions, calculator() and fnOp(). The function, calculator(), performs input and output, and passes the arguments to the function fnOp() which calculates the results.

```
re := calculator( )    Call function


calculator( )
{
  1   print("enter number, operation (+,-,*,/) and again number")
  2   print("press enter after every line")
  3   // Function getc() is used for the console input
  4   // its argument defines the type of input
  5   a := getc(1.1)
  6   b := getc("+")
  7   c := getc(1.1)
  8   print("is")
  9   //fnOP() is called in the next line
  10  print( to string( fnOp(a , b , c) ) )
}


fnOp(a , b , c)
{
  1   //If-else if statement
      if( b == "+" )
  2   {
    1   return(a + c)
      }
      else if( "-" == b )
  3   {
    1   //use return()
    2   return(a - c)
      }
      else if( "*" == b )
  4   {
    1   return(a · c)
      }
      else if( "/" == b )
  5   {
    1   return(a / c)
      }
  6   return(void)
}
```