STIN 2024: LOGIC PROGRAMMING

Develop your own calculator program. Below is the source code for the calculator GUI. Write complete calculator program to perform basic operations, ADDITION (+), SUBSTRACTION (-), MULTIPLICATION (*) and DIVISION (/) for ANY given numbers (1, 12, 123, etc). Input must be entered using the button.

Example: 2 + 3 = 5, 100 + 250 = 350


```
% Source code for GUI
cal_dialog :-
  _Mpro = [dlg_ownedbyprolog,ws_sysmenu,ws_caption,ws_border,dlg_modalframe],
  _Spro = [ws_child,ws_visible,ss_grayframe],
  _S2pro = [ws_child,ws_visible,ss_center],
  _S3pro = [ws_child,ws_visible,ss_whiterect],
  _Bpro = [ws_child,ws_visible,ws_tabstop,bs_pushbutton],
  _B2pro = [ws_child,ws_visible,bs_pushbutton],
  _Epro = [ws_child,ws_visible,ws_border,es_right,es_readonly],

  wdcreate(cal,`CALCULATOR`,203,28,196,266,_Mpro),
  wccreate((cal,1000),static,``,5,5,180,215,_Spro),
  wccreate((cal,100),button,`7`,12,48,24,24,_Bpro),
  wccreate((cal,103),button,`4`,12,84,24,24,_Bpro),
  wccreate((cal,106),button,`1`,12,120,24,24,_Bpro),
  wccreate((cal,109),button,`0`,12,156,24,24,_Bpro),
  wccreate((cal,101),button,`8`,48,48,24,24,_Bpro),
  wccreate((cal,104),button,`5`,48,84,24,24,_Bpro),
  wccreate((cal,107),button,`2`,48,120,24,24,_Bpro),
  wccreate((cal,110),button,`.`,48,156,24,24,_Bpro),
  wccreate((cal,102),button,`9`,84,48,24,24,_Bpro),
  wccreate((cal,105),button,`6`,84,84,24,24,_Bpro),
  wccreate((cal,108),button,`3`,84,120,24,24,_Bpro),
  wccreate((cal,113),button,`/`,156,48,24,36,_Bpro),
  wccreate((cal,114),button,`+`,120,96,24,36,_Bpro),
  wccreate((cal,115),button,`-`,156,96,24,36,_Bpro),
  wccreate((cal,112),button,`*`,120,48,24,36,_Bpro),
  wccreate((cal,800),edit,``,12,12,168,24,_Epro),
  wccreate((cal,116),button,`=`,120,144,60,36,_Bpro),
  wccreate((cal,111),button,`%`,84,156,24,24,_Bpro),
  wccreate((cal,117),button,`&CLEAR SCREEN`,13,198,161,16,_B2pro),
  wccreate((cal,1001),static,``,9,196,170,20,_S3pro),
  wccreate((cal,1002),static,``,9,43,104,143,_S3pro) .
```

Schema

1) GUI runs	→	2m
2) Input enter through key press (button)	→	2m (digits and operations)
3) Accept multiple digits as input	→	2m
4) All operations are working	→	12m
5) Buttons [X] and [CLEAR SCREEN] working as it should.	→	2m