STAT2005 Assignment 4

Solution to Q1:

```
 (a) – (2 + 3 / 2) * 4
    3    2   1    4
    result: -14

(b) Exp(- 3 ** 2 / 4 - 7) * 2
     5  2    1   3   4    6
    result: 0.000192223

(c) – 2 ** 4 + 4 / 2 * 9
    2    1   5   3   4
    result: 2


(d) 10 * 2 >< 3 ** 2
       3    2    1
    result: 20

(e) 2 + 3 = 6 | 3 & 0
      1   2   4   3
    result: 0

(f) This is the compact form of “(3 gt 2)&(2 = 1)”.
    (3 gt 2) & (2 = 1)
        1    3    2
    result: 0

(g) ^ (- 3) + 3
    2  1    3
    result: 3

(h) 4 in (1, 2, 3, 4, 5) and 2
       1                  2
    result: 1

(i) This is the compact form of “(4>3)&(3>=2)”.
     (4 > 3) & (3 >= 2)
        1    3     2
    result: 1

(j) not (’ab  ’ = ’a’ || ”b”)
     3          2      1
    result: 0
```

Solution to Q2:

```
(a) x1=mdy(1,1,year+1)-mdy(1,1,year);

(b) if(scan(x2,3)^= '') then
name = scan(x2,1)||' '
     || substr(scan(x2,2),1,1) ||'.'
     || substr(scan(x2,3),1,1) ||'. ';
Else name=scan(x2,1)||' '||substr(scan(x2,2),1,1)||'.';

(c) det=b*b-4*a*c;
if det>=0 then x3=((-b+sqrt(det))/(2*a))
                  <>((-b-sqrt(det))/(2*a));
else x3=.;

(d) dangel=52;
pi=constant('pi');
c=sqrt(a*a+b*b-2*a*b*cos(pi*dangle/180));

(e) if length(y) le 1 then y=x4; else
y=substr(y,1,length(y)-1)||x4;
```