- **p1 - compute gcd of 2 numbers**

```
DECLARE a integer;
DECLARE b integer;

READ(a);
READ(b);

WHILE (a != b)
{
        IF (a > b)
        {
                a = a - b;
        }
        ELSE
        {
                b = b - a;
        }
}
WRITE(a);
```

- **p2 - compute lcm of 2 numbers**

```
DECLARE a integer;
DECLARE b integer;

READ(a);
READ(b);

DECLARE copy_a integer;
DECLARE copy_b integer;

copy_a = a;
copy_b = b;

DECLARE gcd integer;
DECLARE lcm integer;

WHILE (a != b)
{
        IF (a > b)
        {
                a = a - b;
        }
        ELSE
        {
                b = b - a;
        }
```

```
}
gcd = a;

lcm = copy_a*copy_b / gcd;

WRITE(lcm);
```

- **p3: compute the sum of n numbers**

```
DECLARE n integer;
READ(n);

DECLARE arr[n] array[integer];

FOR i in (0:n)
{
        READ(arr[i]);
}

DECLARE sum integer;
sum = 0;

FOR i in (0:n)
{
        sum += arr[i];
}
WRITE(sum);
```

p1err should contain 2 types of lexical errors
p1err: Check if two chars are identical

```
DECLARE 1char char;
DECLARE char2 char;

1char = 'c';
char2 = 'c;

IF (1char == char2)
{
        WRITE('They are equal');
}
ELSE
{
        WRITE('They are not equal');
}
```