3 sections:
header, list of government bonds with its yield percentage and a list of investments. each section and separated from the other by an odd number of characters # (at least 3).
the header section and consists of two types of tokens:
<date>: a date with the format "DD / MM / YYYY" between 03/07/2011 and 23/12/2011. remember that the months of September and November are composed of just 30 days.
<Code>: it begins with an odd number between -21 and 1231 followed by at least 4 characters "*", "+" or "-" in any order and in even numbers (eg +-+*, ++++++,++***-++). the token is then finished, optionally, a word composed of letters and numbers which the first character is a number.
<Code> the token may appear in the header section in any order and number (including 0), <date>, however, may appear at most once (ie zero or one time) (must be run with the grammar). each token is terminated by the character ";".

the section containing the list of government bonds is composed of a <codice_titolo> (the word "IT" followed by a number consists of 6 digits), followed by a title name (any string in double quotes), the character ":", a <lista_di_rendimenti> and is terminated by the character ";".
<lista_di_rendimenti> is a possibly empty list of <rendimenti> separated by ",". <rendimenti> is composed of a year (an integer) and the annual percentage yield (a floating point number followed by the % character).
the third section is composed of a (possibly empty and odd number) of government bonds. each element of the list is composed of a <codice_titolo>, the ":" character, a <lista_di_investimenti> is composed of a <anno_inizio> (that is), a <valore_investito> (a floating point number with two digits decimals) and the word "euro".

Goal:
the compiler, each title must calculate the present value obtained by adding to <valore_investito> the interest earned in the years between <anno_inizio> and <anno_fine> from that specific investment. Finally, the compiler will have to get the sum of all value or current, the total assets.
you look at the example.
for a specific investment, such as the investment of € 1,000 on the title IT393465:
IT393465: 2009 2011 1000.00 €
the current value is obtained with the following formula:
1000.00. (1 +0.04) pow 2011-2009 +1 = 1124.86 (1)
where corresponds to the interest of 00:04 in 2009 and IT393465 (2011-2009 +1) is the duration of the investment (3 years).
The only global variable is a symbol table used to map the ticker with interest.
in the third section, to access the code title in order to get the interest rate from the symbol table and apply formula (1) use the inherited attributes.
to get the total assets instead use synthesized attributes and the default object RESULTS. solutions that use global variable will not be accepted