

1. Study the piece of code below:

```
int no1, no2, no3, ans;  
no1 = 10;  
no2 = 20;  
no3 = 2;  
ans = no1 + no2;  
ans = no1 + no2 * no3;
```

Write a BNF grammar for the above language that caters the scope of the program.

2. Based on the BNF grammar written above, design a simple programming language of your own, with your own syntax definitions. E.g. Denoting the beginning of a program with keyword BEGIN instead of main(). Then:
 - a. Give a name to your language
 - b. Produce the BNF grammar for the language
 - c. Test your grammar with at least two parse trees.

Submit answer to **question 2** by 5 p.m. on Friday, 14th October 2011.