printPattern2

Write a program that reads an integer number (between 1 and 9) as its parameter, and prints a pattern with the specified number. No need to check errors on user input. For example, if the number is 9, the following pattern will be printed:

A BA ABA BABA ABABA BABABA BABABABA ABABABABA

A sample program template is given below:

```
#include <stdio.h>
int main()
{
    /* Write your code here */
    return 0;
}
```

Sample input and output sessions are given below:

- (1) Test Case 1:
 Enter the height:
 3
 The pattern is:
 A
 BA
 ABA
- (2) Test Case 2: Enter the height:

8
The pattern is:
A
BA
ABA
BABA
BABA
BABABA

ABABABA BABABABA