Student Name:	Lab 12
Student Number:	

Implement the following procedure in MIPS. You will have to save $a0 and $ra to the stack as in the factorial.asm example programs because this is a non-leaf recursive procedure. The return value to should be returned in $v0.

```
int add_r(int n)
{
    if (n != 0) return n + add_r(n - 1);
    else return 0;
}
```

In your main line code, ask the user for an integer.
Pass the integer to the add_r procedure in $a0.
The return value from add_r should be in $v0.
Print the returned value.

Example Execution:

```
Please enter an integer: 5
Returned value = 15
```

The following is required for all assignments and is included in the rubric for grading:

- You need to name your file as "LastName-Name-Lab12.asm" (Example: Talley-Michelle-Lab12.asm)
- Your program will need to have the exact output unless otherwise stated.
- Your source needs to have comments that explain your implementation.
- Your procedures need to begin with a standard comment section.
- You need to include the following set of comments at the top of your source code for all assignments.
  #Your Name
  #Assignment # (Example: Lab #12)
- You need to submit your source code on blackboard.
- You may use utils.asm, but you must submit it with your source code.
- Please submit your files in a zip file named LastName-FirstName- Lab12.zip) and make sure you include any files that are used as includes in the zip file (Example: utils.asm).
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