

In this program you are creating a function that takes in a number, cubes it, and then returns the value; We will also discuss this in class, but for now just type in the code in your cloud workspace and get the program to compile and run.

When a function creates a new variable it is actually creating a section of computer memory to save the information in

When the function returns to the main program it carries this information and it is then stored in the area the main program has set aside for storage

In this case: the main program will put the result into "end\_num"

The function puts the result into "result" and carries that back to the main program for storage

```
#include <cs50.h>
#include <stdio.h>

// prototype setup for the function name
int cube_work(int start_num);

int main(void)
{
    printf("Please enter a number to be cubed \n");
    int start_num = GetInt();
    // the start_num is passed to the function
    int end_num = cube_work(start_num);
    // the result from cube_work will be stored in end_num
    printf("You entered a : %d \n", start_num);
    printf("The cubed result is: %d \n", end_num);
}

// function takes in a parameter
// performs calculations
// returns the result back to the main program
int cube_work(int start_num)
{
    int result = start_num * start_num * start_num;
    return(result);
}
```

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