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1. Library functions are built-in functions that are grouped together and stored in a single location known as the library. Each function in this section performs a specific operation. To obtain the pre-defined output, we can use the library functions. Many header files are used to declare all C standard library functions. These library functions are created during the compiler design process. Below is the example of C standard library functions :

- a) `stdio.h (getchar)` : Reads a single character from stdin.
- b) `stdio.h (getc)` : Reads a single character from the input stream.
- c) `math.h (tan)` : Calculates the tangent of x.

References:

- <https://www.programiz.com/c-programming/library-function>

2. Void function () → this is void as function return type, Nonvalue-returning functions, also known as void return types, are used in the same way that value-returning functions are, with the exception that void return types do not return a value when the function is executed. After completing its task, the void function returns control to the caller. The void function call is an independent statement.
Void function (void) → this is void as function parameter, indicate the function takes no actual parameters.

References:

- <https://jameshfisher.com/2016/11/27/c-void-params/>

3. Below is some difference between local and global variable :
 - For local variables it's variable are declared inside a function while global variable are declared outside any function.
 - The scope for local variable is within a function, inside which they are declared while global variable throughout all the program



- To access for the local variable, accessed only by the statements, inside a function in which they are declared while global variable accessed by any statement in the entire program.

References:

- <https://www.javatpoint.com/local-variable-vs-global-variable>

4. The program will be error, in this case the program didn't recognize the inc function because the program read a code from top to bottom. If the function placed before main function the output will be 0.

References:

- https://www.tutorialspoint.com/cprogramming/c_functions.htm

5. Below is the program :

```
#include <iostream>
```

```
int cube(int num){  
    int result;  
    result = num*num*num;  
    printf("The Result is : %d ", result);  
}
```

```
int main(){  
    int number;  
    printf("Enter the number : ");  
    scanf("%d", &number);  
    cube(number);  
    return 0;  
}
```

THE OUTPUT :



Enter the number : 3

The Result is : 27

Process exited after 0.788 seconds with return value 0

Press any key to continue . . .

References:

- <https://www.programiz.com/c-programming/c-functions>