

# **QUESTIONS ON USER DEFINED FUNCTIONS**

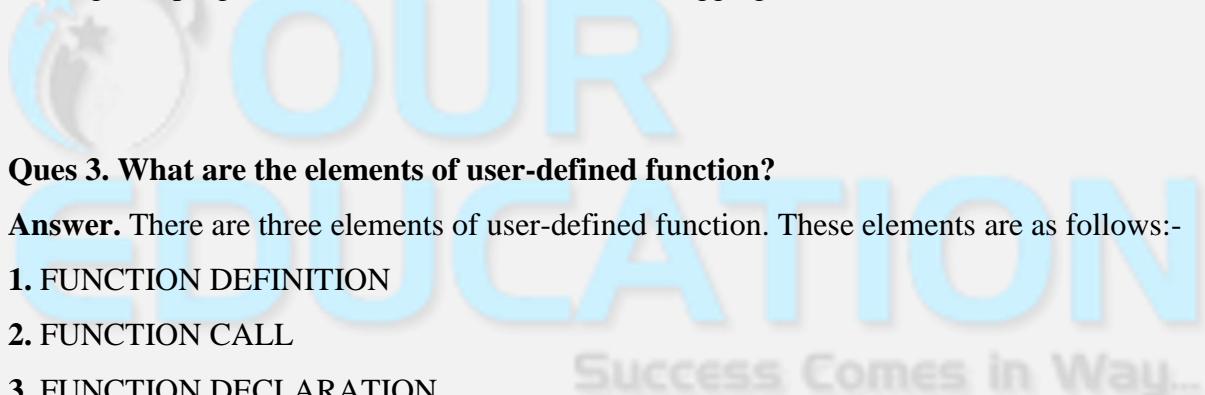
**Ques 1. What is the difference between User Defined Function and Library Function?**

**Answer.** User Defined Functions has to be Developed by the user at the time of writing a program like **Main()** while library defined functions are already defined in the library of C and cannot be further modified like **Printf()**.

**Ques 2. What are the advantages of user-defined function?**

**Answer.** Following are the advantages of user-defined function:-

1. It Facilitates top down programming.
2. It can be used by any other program.
3. Length of program can be reduced and makes debugging easier.



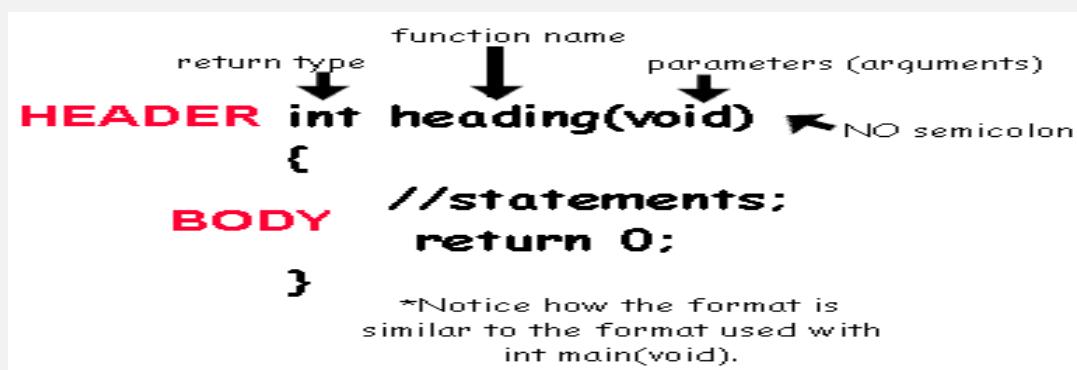
**Ques 3. What are the elements of user-defined function?**

**Answer.** There are three elements of user-defined function. These elements are as follows:-

1. FUNCTION DEFINITION
2. FUNCTION CALL
3. FUNCTION DECLARATION

**Ques 4. What are the elements of function definition?**

**Answer.** Function Definition shall include the following elements:-



*Elements of Function Definition*

- 1. Function name**
- 2. Function type.**
- 3. List of parameters**
- 4. Local variable declaration**
- 5. Function statement**
- 6. Return statement.**

#### **Ques 5. What are the similarities between variables and functions?**

**Answer.** They both have the following similarities:-

- 1. They both adhere to the rule of Identifier.**
- 2. Both have a type associated with it.**
- 3. Their type must be declared and defined before they are used.**

#### **Ques 6. What are the different categories of a function?**

**Answer.** The different categories of a function are:-

- 1. Function with no argument and no return value.**
- 2. Function with argument and no return value.**
- 3. Function with argument and one return value.**
- 4. Function with no argument but return a value.**
- 5. Function that return multiple value.**

#### **Ques 7. What are the rules for passing an array to a function?**

**Answer.** There are three different rules for passing an array to a function:-

- 1. The function must be called by passing the name of an array.**
- 2. In function definition the size of the array does not need to be specified.**
- 3. The function prototype must show that the argument is in array.**

#### **Ques 8. What is the difference between Automatic variable and static variable?**

**Answer.** **Automatic variables** are created when an already existing function is called and

destroyed automatically while the **static** variable can be declared anywhere in the program by using static keyword.

**Ques 9. What are the different ways of parameter passing?**

**Answer.** There are two different ways of passing data from one function to another:-

**1. Pass by Value**:-Actual parameters are copied to the variable in the parameter list of the called function.

**2. Pass by Reference**:-Memory address of the variable is sent to the called function.

**Ques 10. What is the difference between global prototype and local prototype?**

**Answer.** When we place the declaration above all the function it is called global prototype while when the prototype is in the function definition it is called local prototype.

