**Function Pointer assignments**

1. WAP to invoke functions below based on user input character using function pointer. Character mapping and respective functions to be invoked are given below.

|  |  |
| --- | --- |
| Character input | Function |
| + | int add(int x, int y) |
| - | int sub(int x, int y) |
| \* | int multiply(int x, int y) |
| / | int divide(int x, int y) |

1. Code:





Output:

A screenshot of a computer

Description automatically generated

1. Extend Q1 to include a function below which will return the address of a function based on input character.

<address of function> getaddr(char mychar);

1. Code:





A screen shot of a computer

Description automatically generated

Output:

A screen shot of a computer program

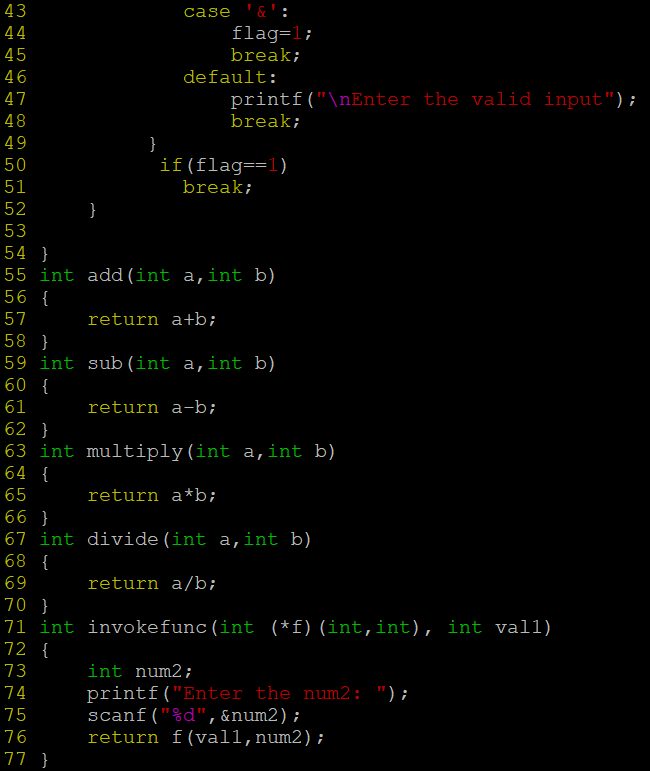
Description automatically generated

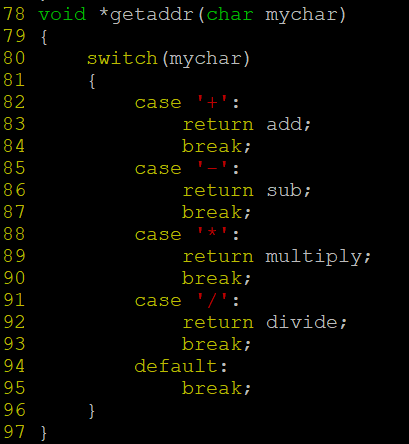
1. Extend Q1 to include a function below which takes a function pointer to a calculator function and one integer (value = 10) as arguments and shall invoke the given function with required arguments. For the second argument read input from user. Return the result.

int invokefunc(<function pointer as argument1>, int val1);

1. Code:







Output:

A screenshot of a computer program

Description automatically generated

1. Extend Q1 to define an array of function pointers and invoke them based user input character.

1. Code:

A screen shot of a computer program

Description automatically generated



Output:

