

[C] Attempt the following:

- (a) If a macro is not getting expanded as per your expectation, how will you find out how is it being expanded by the preprocessor.
- (b) Write down macro definitions for the following:
 1. To test whether a character is a small case letter or not.
 2. To test whether a character is a upper case letter or not.
 3. To test whether a character is an alphabet or not. Make use of the macros you defined in 1 and 2 above.
 4. To obtain the bigger of two numbers.
- (c) Write macro definitions with arguments for calculation of area and perimeter of a triangle, a square and a circle. Store these macro definitions in a file called "areaperi.h". Include this file in your program, and call the macro definitions for calculating area and perimeter for different squares, triangles and circles.
- (d) Write down macro definitions for the following:
 1. To find arithmetic mean of two numbers.
 2. To find absolute value of a number.
 3. To convert a uppercase alphabet to lowercase.
 4. To obtain the bigger of two numbers.
- (e) Write macro definitions with arguments for calculation of Simple Interest and Amount. Store these macro definitions in a file called "interest.h". Include this file in your program, and use the macro definitions for calculating simple interest and amount.