

Div B - CCA - 1, Nov 1 2022
Time 345p-430p

Solve All Qs

1. Given that the program needs to use a variable that will be used to represent a month by its number. For example - 1 to represent Jan and 12 to represent Dec. What C data type will you use to represent this?

- ☐ Write a small piece of code to show the declaration
- ☐ No need to write main(), only declaration adequate
- ☐ Justify your choice in 3-4 lines

2. Declare an array of integers and initialize the array with 5 integers, for example, -10, 20, -30, 40, -50. Then, write a function that receives this array by reference. The function then triples each element in the array. In the caller function, pass the array reference to this function and on return, print the array where each element now should be tripled

- ☐ You can use your own numbers to initialize the array
- ☐ Write triple() function and call it from main() function
- ☐ Use printf() inside the main() to output the original array and the tripled array

3. On a given platform, you're asked to write a C program to find out size of char, int, short, float, double, long variable types.

Write a code snippet to demonstrate how will you do it?

4. Given the following C program -

```
void funcA(int a) {  
    funcB(a);  
}  
  
void funcB(int b) {  
    funcC(b);  
}  
  
void funcC(int c) {  
    int l;  
  
    l = c;  
  
    return;  
}  
  
int main(void) {  
    funcA(10);  
}
```

If the debugger is stopped at the line "l = c;" inside funcC() -

- [] Draw the chain of call stacks.
- [] For every frame on the call stack, show the variable usage
- [] In 1 para, explain your understanding of the function calls mechanism in C