1) Write a simple program for nested comments. what is the error & how we resolve it?

main.c

```
1  // Online C compiler to run C program online
2  #include <stdio.h>
3
4  int main() {
5      // Write C code here
6      /*
7      printf("1. Hello world\n");
8      /*
9      printf("2. Hello world\n");
10     */
11     printf("3. Hello world\n");
12     printf("4. Hello world\n");
13     */
14     return 0;
15 }
```

Output

```
gcc /tmp/ksQhr4QGmJ.c -lm
/tmp/ksQhr4QGmJ.c: In function 'main':
/tmp/ksQhr4QGmJ.c:13:6: error: expected expression before '/' token
   13 |     */
      |      ^
```

We should not write nested comments. '/*' at Line 6 starts commenting code and ignores '/* at line 8 as its looking for '*/' to end comment. So now comments will end at line 10. That's the reason we are getting error at line 13.

'/*': start comments and '*/': stop comments

If we should comment out code as below, which will print "3. Hello world".

main.c

```
1  // Online C compiler to run C program online
2  #include <stdio.h>
3
4  int main() {
5      // Write C code here
6      /*
7      printf("1. Hello world\n");
8      printf("2. Hello world\n");
9      */
10     printf("3. Hello world\n");
11     /*
12     printf("4. Hello world\n");
13     */
14     return 0;
15 }
```

Output

```
/tmp/ksQhr4QGmJ.o
3. Hello world
```

2) A block of code is given to you and comment out all the code.

main.c

Run

Output

```
#include <stdio.h>
int main()
{
    /*
    char ch1, ch2, ch3;
    ch1 = 65;
    ch2 = 'b';
    ch3 = '3';
    printf("ch1 = %c\n", ch1);
    printf("ch2 = %c\n", ch2);
    printf("ch3 = %c\n", ch3);
    printf("ch1 = %d\n", ch1);
    printf("ch2 = %d\n", ch2);
    printf("ch3 = %d\n", ch3);
    */
}
```

```
/tmp/VfhOuwHxQ9.o
```

3) Execute the following code and note down the outputs.

main.c

Run

Output

```
#include <stdio.h>
int main()
{

    char ch1, ch2, ch3;
    ch1 = 65;
    ch2 = 'b';
    ch3 = '3';
    printf("ch1 = %c\n", ch1);
    printf("ch2 = %c\n", ch2);
    printf("ch3 = %c\n", ch3);
    printf("ch1 = %d\n", ch1);
    printf("ch2 = %d\n", ch2);
    printf("ch3 = %d\n", ch3);

}
```

```
/tmp/VfhOuwHxQ9.o
ch1 = A
ch2 = b
ch3 = 3
ch1 = 65
ch2 = 98
ch3 = 51
```