```c
#include <stdio.h>

int main() {/*
1)  //Q2

a) pow(b,2)-4*a*c
b) (-b+sqrt(d))/ (2*a)
c) (-b-sqrt(d))/ (2*a)
2)
a) log(1-x)/log(1.0/2)
b) 12.26*n

*/}
void split_name(char* name, char* fname, char* ffname, char* gender){
char *m, null;
sscanf(name, "%s %s &c %s", m, fname, &null, ffname);
if(m[2] == '.')
*gender = 'm';
*gender = 'f';
}

char* format_name(char* fname, char* mname, char* ffname, char gender){
char* result = NULL;
if(gender == 'm'){
result = (char*)malloc(sizeof(char)*(strlen(fname)+strnlen(ffname)+7));
sprintf(result, "%s %s %c. %s", "Mr.", fname, mname[0], ffname );
}else{
result = (char*)malloc(sizeof(char)*(strlen(fname)+strnlen(ffname)+8));
sprintf(result, "%s %s %c. %s", "Mrs.", fname, mname[0], ffname );
}
return result;
}




PS C:\Users\Dell> cd "c:\Users\Dell\OneDrive\Documents\Lbs C\lab 3\" ;
if ($?) { gcc test.c -o test } ; if ($?) { .\test }
```

```c
#include <stdio.h>

int main() {
//1
// int (*pMyFunc)(int);
//2
//int(*ptr[t])();
//an array namred ptr of 5 fun of pointers each returns int
// void(*f)(); f=(void(*)())&f1; f=(void(*)())&f2;

    return 0;
}
```

```
PS C:\Users\Dell> cd "c:\Users\Dell\OneDrive\Documents\Lbs C\lab 3\" ;
if ($?) { gcc test.c -o test } ; if ($?) { .\test }
```

Question 4 : What is the output of the following program

```c
1)   #include <stdio.h>
2)   int add(int first, int second){
3)     return first + second + 15;
4)   }
5)   int operation(int first, int second, int (*functocall)(int, int)){
6)     return (*functocall)(first, second);
7)   }
8)   int main(){
9)     int  a;
10)    int  (*plus)(int, int) = add;
11)    a = operation(15, 10, plus);
12)    printf("%d", a);
13)    return 0;
14)  }
```

The output will be 40

Link: https://github.com/Link20222/CSC_215_KSU_44_C-language/tree/main/HWs/3 (I will upload my codes in GitHub later)