

Name: Roll No:
e.g. 170001Dept.:
e.g. CHESect.:
e.g. A4

IIT Kanpur
ESC101 Fundam. of Comp.
Minor Quiz 9A
Date: April 10, 2018

Instructions:**Total: 10 marks**

1. Write your name, roll number, department, section on **every side of every sheet** of this quiz paper
2. Write final answers **neatly with a pen** in the given box.
3. Do not give derivations/elaborate steps unless the question specifically asks you to provide these.

Problem 1 (True or False: $20 \times 0.5 = 10$ marks). For each of the following simply write **T** or **F** in the box.

1. **F** A directory can contain either files or directories but not both.
2. **T** gcc does not create executable file or a.out when there are compilation errors.
3. **F** “mkdir esc101 phy103 mth 102 chm102” command on terminal creates 4 directories.
4. **T** It is valid to write `int main(void)` in C instead of `int main()` or `int main(int argc, char** argv)`.
5. **F** `atoi(“-1123.012”)` will return 1123.
6. **F** The flag `-o` of gcc can be used to give user-defined name to the C code file.
7. **T** `mv` command can be used to rename a file as well.
8. **T** Consider the terminal command: `./a.out “1 23 4”`
argc will be 2 in this case.
9. **T** `fopen` returns a file pointer whereas return data type of `fclose` is `int`.
10. **T** `fopen` returns `NULL` if it is unsuccessful.
11. **F** If `fp` is of type `FILE *`, `!feof(fp)` will evaluate to true when you reach end of file.
12. **F** File must exist if you want to use “r” mode in `fopen` command but “r+” mode creates the file if it doesn’t exist and opens the file.
13. **F** `SEEK_START` as origin (3^{rd} argument) in `fseek` command means the beginning of file.
14. **T** `char** argv` is same as `char *argv[]`.
15. **T** `int ferror(FILE *fp)` checks whether the error indicator has been set for `fp`.

Name:

IIT Kanpur
ESC101 Fundam. of Comp.
Minor Quiz 9A
Date: April 10, 2018

Roll No:
e.g. 170001Dept.:
e.g. CHESect.:
e.g. A4

-
16. **F** In Unix-like operating systems, “pwd” in pwd command stands for “present working directory”.
17. **T** If you open a file in “a+” mode in fopen, file position for reading is at the beginning, but output is appended to the end.
18. **T** ls command can be used to list all files in a directory.
19. **T** 3 files i.e. stdin, stdout and stderr are always connected to a C program.
20. **F** Suppose “ESC101 is fun” is written in “file.txt” and the below C code in box is in the same directory as “file.txt”. The output on running this C program will be:

ESC101ESC101 is fun

```
1 #include <stdio.h>
2
3 int main() {
4     char str1[30], str2[30];
5     FILE *fp = fopen("file.txt", "r");
6     fscanf(fp, "%s", str1);
7     printf("%s", str1);
8     fgets(str2, 30, fp);
9     printf("%s", str2);
10    fclose(fp);
11    return 0;
12 }
```

BLANK SPACE: Any answers written here will be left ungraded.

No exceptions.

You may use this space for rough work.