Name: Md Saiful Islam

ld: 21101013

struct and function

Task-1

```
Activities Terminal

Thu 12 Sep 15:13:17

hp@hp-HP-280-Pro-G6-Microtower-PC:-$ gedit restaurant_bill.c

A?AC

hp@hp-HP-280-Pro-G6-Microtower-PC:-$ gcc -o restaurant_bill restaurant_bill.c

hpghp-HP-280-Pro-G6-Microtower-PC:-$ ./restaurant_bill

Quantity Of Paratha: 25

Unit Price: 10

Quantity Of Vegetables: 5

Unit Price: 20

Quantity Of Mineral Water: 20

Unit Price: 20

Number of People: 6

Individual people will pay: 125.00 tk

hp@hp-HP-280-Pro-G6-Microtower-PC:-$

Individual People will pay: 125.00 tk
```

Task-2

```
Activities Terminal Thu 12 Sep 15'58'17

hp@hp-HP-280-Pro-G6-Microtower-PC:-$ touch perfect_numbhers.c
hpghp-HP-280-Pro-G6-Microtower-PC:-$ ged't perfect_numbhers.c
hpghp-HP-280-Pro-G6-Microtower-PC:-$ gec -o perfect_numbers perfect_numbhers.c
hpghp-HP-280-Pro-G6-Microtower-PC:-$ ./perfect_numbers
Enter lower limit: 1
Enter higher limit: 1000
Perfect number between this interval 6
Perfect number between this interval 28
Perfect number between this interval 496
hpghp-HP-280-Pro-G6-Microtower-PC:-$
```

system call Task-1

Task-2

```
Activities Terminal Thu 12 Sep 16:30:56

hp@hp-HP-280-Pro-G6-Microtower-PC:-$ gedit process_order.c
hp@hp-HP-280-Pro-G6-Microtower-PC:-$ gcc -o process_order process_order.c
hp@hp-HP-280-Pro-G6-Microtower-PC:-$ ./process_order
I am grandchild
I am parent
hp@hp-HP-280-Pro-G6-Microtower-PC:-$
```

```
Activities Terminal

To run a command as administrator (user "root"), use "sudo <command>".

See "man sudo_root" for details.

hp@gang:-$ gedit systemcall_task3.c
hp@gang:-$ gcc -o systemcall_task3 systemcall_task3.c
hp@gang:-$ ./systemcall_task3

Value of a: 37783

Value of b: 37784

Value of c: 37786

Total number of processes created: 4
hp@gang:-$
```

```
Activities Terminal

Terminal

Terminal

* Terminal

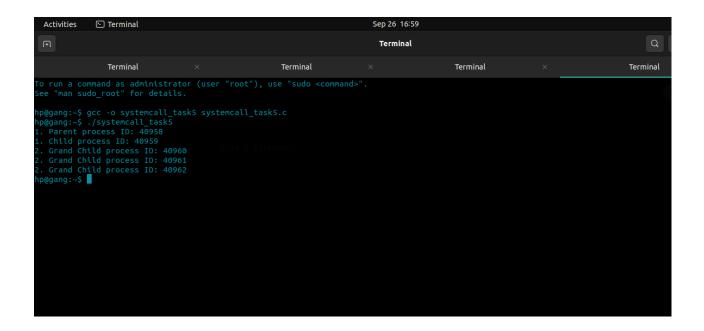
To run a command as administrator (user "root"), use "sudo <command>".

See "man sudo_root" for detatls.

hp@gang:-$ gcc -o process process.c
hp@gang:-$ gcc -o sort sort.c
hp@gang:-$ gcc -o sort sort.c
hp@gang:-$ /process 10 5 8 7 6 3 54
Sorted array in descending order from child process:

54 10 8 7 6 5 3
10 is even
5 ts odd
8 is even
7 is odd
6 is even
3 is odd
54 is even
hp@gang:-$
```

Task 5



Threading

Task 1

```
hp@gang:~$ gedit threading_task1.c

** (gedit:41001): WARNING **: 17:01:54.838: Set document metadata failed: Unable to set metadata key

** (gedit:41001): WARNING **: 17:01:54.841: Set document metadata failed: Unable to set metadata key

** (gedit:41001): WARNING **: 17:01:57.235: Set document metadata failed: Unable to set metadata key

hp@gang:~$ gcc -o threading_task1 threading_task1.c

hp@gang:~$ ./threading_task1

thread-1 running

thread-2 running

thread-2 running

thread-3 running

thread-3 running

thread-4 running

thread-4 running

thread-5 closed

thread-5 running

thread-5 closed

hp@gang:~$ ...
```

```
Terminal

Terminal

Terminal

Terminal

To run a command as administrator (user "root"), use "sudo <command>".

See "man sudo_root" for details.

hp@gang:-$ gcc -o threading_task2 threading_task2.c
hp@gang:-$ ./threading_task2

Thread 2 prints 11

Thread 2 prints 12

Thread 2 prints 13

Thread 2 prints 13

Thread 2 prints 15

Thread 0 prints 2

Thread 0 prints 4

Thread 0 prints 4

Thread 1 prints 5

Thread 1 prints 6

Thread 1 prints 6

Thread 1 prints 16

Thread 3 prints 16

Thread 3 prints 17

Thread 3 prints 18

Thread 3 prints 19

Thread 3 prints 19

Thread 4 prints 21

Thread 4 prints 21

Thread 4 prints 21

Thread 4 prints 21

Thread 4 prints 23

Thread 4 prints 24

Thread 4 prints 24

Thread 4 prints 25
hp@gang:-$ ■
```

