PES UNIVERSITY

Department of Computer Science & Engineering

Operating Systems Assignment

UE23CS242B

Exercise 1 Submission

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Please look at page 4 for execution

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Main program screenshot:

C prog-exercise_1.c > ...

```c
// Write a program which accepts two integers x and y.
// Now use exec to execute another user defined program that prints the product of x and y

#include <stdio.h>
#include <stdlib.h>
#include <unistd.h>

int main()
{
    int x, y;

    printf("Enter the value of X: ");
    scanf("%d", &x);

    printf("Enter the value of Y: ");
    scanf("%d", &y);

    // test part
    /*
    int prod = x * y;
    printf("Product is %d", prod);
    */

    char strx[20], stry[20];
    snprintf(strx, sizeof(strx), "%d", x);
    snprintf(stry, sizeof(stry), "%d", y);

    execl("./prog-exercise_1_product", "/Users/pranavhemanth/Code/Academics/OS-S4", strx, stry, NULL);

    perror("execl failed");
    return 1;
}
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

```
pranavhemanth@Pranavs-MacBook-Pro-M3 OS-S4 %
```

Helper program (Product) screenshot:

C prog-exercise_1_product.c > main(int, char * [])

```c
// External product program

#include <stdio.h>
#include <stdlib.h>
#include <unistd.h>

int main(int argc, char *argv[])
{
    if (argc != 3)
    {
        printf("Wrong number of arguments");
        return 1;
    }

    int x = atoi(argv[1]);
    int y = atoi(argv[2]);

    int prod = x * y;

    printf("Product of %d and %d is: %d", x, y, prod);

    return 0;
}
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

```
pranavhemanth@Pranavs-MacBook-Pro-M3 OS-S4 %
```

Execution screenshot: