



PES UNIVERSITY

Department of Computer Science & Engineering

Operating Systems Assignment

UE23CS242B

Exercise 1 Submission

Name of the Student	Pranav Hemanth
SRN	PES1UG23CS433
Section	G
Department	CSE
Campus	RR

Please look at page 4 for execution

Jan -May 2025 Assignment SUBMISSION_UE23CS242B

Department of Computer Science & Engineering Operating Systems Assignment

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Main program screenshot:

```
C prog-exercise_1.c > ...
1 // Write a program which accepts two integers x and y.
2 // Now use exec to execute another user defined program that prints the product of x and y
3
4 #include <stdio.h>
5 #include <stdlib.h>
6 #include <unistd.h>
7
8 int main()
9 {
10     int x, y;
11
12     printf("Enter the value of X: ");
13     scanf("%d", &x);
14
15     printf("Enter the value of Y: ");
16     scanf("%d", &y);
17
18     // test part
19     /*
20     int prod = x * y;
21     printf("Product is %d", prod);
22     */
23
24     char strx[20], stry[20];
25     snprintf(strx, sizeof(strx), "%d", x);
26     snprintf(stry, sizeof(stry), "%d", y);
27
28     execl("./prog-exercise_1_product", "/Users/pranavhemanth/Code/Academics/OS-S4", strx, stry, NULL);
29
30     perror("execl failed");
31     return 1;
32 }
```

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 * [])
1  // External product program
2
3  #include <stdio.h>
4  #include <stdlib.h>
5  #include <unistd.h>
6
7  int main(int argc, char *argv[])
8  {
9      if (argc != 3)
10     {
11         printf("Wrong number of arguments");
12         return 1;
13     }
14
15     int x = atoi(argv[1]);
16     int y = atoi(argv[2]);
17
18     int prod = x * y;
19
20     printf("Product of %d and %d is: %d", x, y, prod);
21
22     return 0;
23 }
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

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

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Execution screenshot:

PROBLEMS	OUTPUT	DEBUG CONSOLE	TERMINAL	PORTS
●	pranavhemanth@Pranavs-MacBook-Pro-M3	0S-S4	%gcc prog-exercise_1.c -o prog-exercise_1	
●	pranavhemanth@Pranavs-MacBook-Pro-M3	0S-S4	%gcc prog-exercise_1_product.c -o prog-exercise_1_product	
●	pranavhemanth@Pranavs-MacBook-Pro-M3	0S-S4	%chmod +x prog-exercise_1	
●	pranavhemanth@Pranavs-MacBook-Pro-M3	0S-S4	%chmod +x prog-exercise_1_product	
●	pranavhemanth@Pranavs-MacBook-Pro-M3	0S-S4	%./prog-exercise_1	
			Enter the value of X: 2	
			Enter the value of Y: 3	
			Product of 2 and 3 is: 6	
○	pranavhemanth@Pranavs-MacBook-Pro-M3	0S-S4	%	