Assignment Number 01

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Batch: C/C-3

Code:

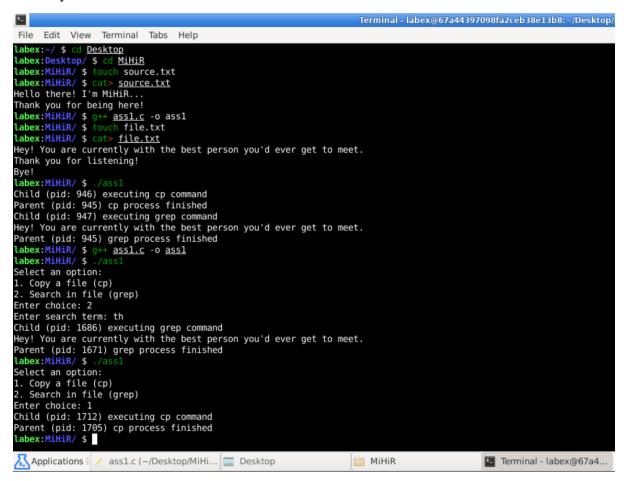
```
#include <stdio.h>
#include <stdlib.h>
#include <sys/types.h>
#include <sys/wait.h>
#include <unistd.h>
#include <string.h>
int main() {
  int choice;
  char searchTerm[100];
  pid_t pid;
  printf("Select an option:\n");
  printf("1. Copy a file (cp)\n");
  printf("2. Search in file (grep)\n");
  printf("Enter choice: ");
  scanf("%d", &choice);
  getchar();
  if (choice == 1) {
     pid = fork();
     if (pid == -1) {
       perror("fork failed");
       exit(1);
     if (pid == 0) {
       printf("Child (pid: %d) executing cp command\n", getpid());
```

```
execl("/bin/cp", "cp", "source.txt", "destination.txt", (char *)NULL);
     perror("execl failed");
     exit(1);
  } else {
     wait(NULL);
     printf("Parent (pid: %d) cp process finished\n", getpid());
  }
} else if (choice == 2) {
  printf("Enter search term: ");
  fgets(searchTerm, sizeof(searchTerm), stdin);
  searchTerm[strcspn(searchTerm, "\n")] = 0;
  pid = fork();
  if (pid == -1) {
     perror("fork failed");
     exit(1);
   }
  if (pid == 0) {
     printf("Child (pid: %d) executing grep command\n", getpid());
     execl("/bin/grep", "grep", searchTerm, "file.txt", (char *)NULL);
     perror("execl failed");
     exit(1);
  } else {
     wait(NULL);
     printf("Parent (pid: %d) grep process finished\n", getpid());
  }
} else {
  printf("Invalid choice!\n");
}
return 0;
```

}

Output:

There are two outputs... The first output had direct command of cp as well as grep...while searching "m" only.



Destination.txt:

