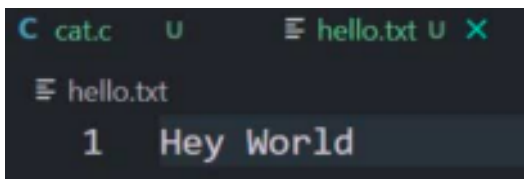---

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EXPERIMENT - 8.

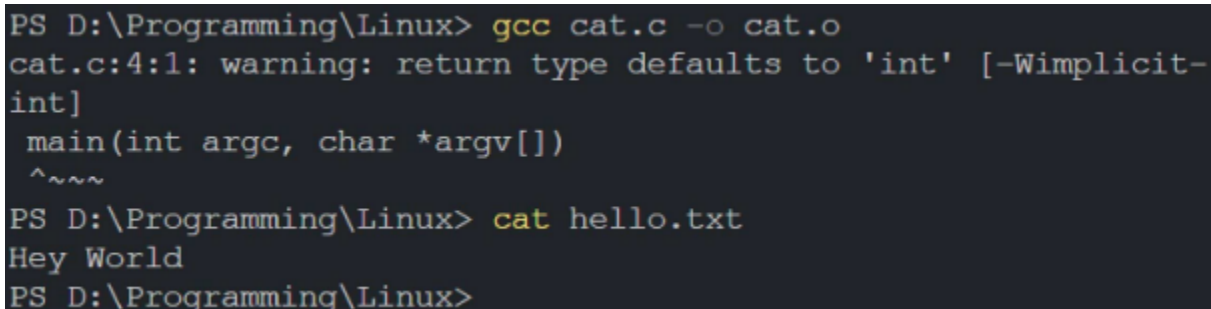Basic commands of linux using kernel APIs.

Aim: Implement basic commands of linux like ls, cp, mv and others using kernel APIs.

Output:

First we create a new file named 'hello.txt' and writing sample text to file then using cat command to display the contents of file.

Theory:

EXPERIMENT 8

Aim: Implement basic commands of linux like ls, cd, mv & others using kernel API's.

Theory:

1) cat command in linux is used to perform many different operations such as reading the contents of a file, concatenating the files, etc.

2) For reading a file, following syntax is used

   cat file1.txt.

   It will display the contents of file1.txt on the terminal.

3) For performing concatenation operation, following syntax is used.

   cat file1.txt file2.txt > file3.txt

   It will concatenate the contents of file 1,2 in file 3.txt.

4) For saving concatenation result in a new file the above syntax is used.
   For normal concatenation, syntax is
   cat file1.txt file2.txt

Code:

```c
#include <fcntl.h> //header file for file operations
#include <stdio.h>
#include <stdlib.h>
main(int argc, char *argv[])
{

    if (argc != 2)
    { // checks if two arguments are present
        printf("\nThe syntax should as be follows");
        printf("\nCommandname filetoread\n");
        exit(1);
    }
    int fdold, count;
    char buffer[2048]; // character buffer to store the bytes
    fdold = open(argv[1], O_RDONLY);
    if (fdold == -1)
    {
        printf("cannot open file");
        exit(1);
    }
    while ((count = read(fdold, buffer, sizeof(buffer))) > 0) // displaying the content
    {
        printf("%s", buffer);
    }
    exit(0);
}
```

Conclusion:-

Conclusion :

Basic commands of linux have been implemented and studied. The concatenation operator is used in reading contents of files, concatenating multiple files, etc.