Name: - Harsh Zanwar

Class: - AIDS-C / B1

Roll Number :- 77
PRN: - 12110333

Write a program demonstrating use of different system calls.

1) process related system call:fork,wait,

2) file related:open, read, write, close

Code: -

```python
import os
import multiprocessing

def child_process():
    print("Child process running with PID:", os.getpid())
    print("Child process ended.")

if __name__ == "__main__":
    print("Parent process started with PID:", os.getpid())
    parent_process = multiprocessing.Process(target=child_process)
    parent_process.start()
    parent_process.join()
    print("Parent process ended.")

    file_path = "example.txt"
    with open(file_path, "w") as file:
        file.write("Hello, World!")

    with open(file_path, "r") as file:
        data = file.read()
        print("Read from file:", data)
        file.close()

    try:
        os.chmod(file_path, 0o666)
        file_mode = os.stat(file_path).st_mode & 0o777
```

```
    print("File mode after changing:", oct(file_mode))
except Exception as e:
    print("Error occurred while changing file mode:", e)
```

Output :-

```
Parent process started with PID: 11724
Child process running with PID: 26228
Child process ended.
Parent process ended.
Read from file: Hello, World!
File mode after changing: 0o666
PS D:\OS>
```