```
#include <iostream>
#include <unistd.h>
#include <fcntl.h>
#include <sys/wait.h>
#include <cstdlib>
using namespace std;
int main() {
  int fd[2];
  pid_t pid;
  // Open file11.txt for reading
  int filedes = open("file11.txt", O_RDONLY);
  if (filedes == -1) {
     perror("Error opening file11.txt");
     exit(1);
  }
  // Create a pipe
  if (pipe(fd) == -1) {
     perror("Pipe failed");
     exit(1);
  }
  pid = fork();
  if (pid < 0) {
     perror("Fork failed");
     exit(1);
  }
  if (pid == 0) {
     // Child process
     // Redirect stdin to file11.txt
     dup2(filedes, STDIN_FILENO);
     close(filedes);
     // Redirect stdout to pipe write end
     dup2(fd[1], STDOUT_FILENO);
     // Close unused pipe ends
     close(fd[0]);
```

```
close(fd[1]);
     // Execute sort
     execl("/usr/bin/sort", "sort", (char*)nullptr);
     // If exect fails
     perror("execl failed (sort)");
     exit(1);
  } else {
     // Parent process
     wait(NULL); // Wait for child to finish
     // Redirect stdin to pipe read end
     dup2(fd[0], STDIN_FILENO);
     // Close unused pipe ends
     close(fd[0]);
     close(fd[1]);
     close(filedes);
     // Execute uniq
     execl("/usr/bin/uniq", "uniq", (char*)nullptr);
     // If exect fails
     perror("execl failed (uniq)");
     exit(1);
  }
  return 0;
output: Sample file11.txt:
nginx
CopyEdit
banana
apple
banana
banana
apple
cherry
cherry
banana
```

}

Expected Output (after sort | uniq):

nginx CopyEdit apple banana cherry

★ Compile and Run:

bash
CopyEdit
g++ main.cpp -o prog
./prog