Simple Shell

This project consists of designing a C/C++ program to serve as a shell interface that accepts user commands and then executes each command in a separate process.

Run the program

```
g++ main.cpp -o prog
./prog
```

Features

1. Execute a command in child process

- Support internal commands such as `ls`, `ps`, `cat`, etc.

```
osh> ls
```

- Make command run in the background by appending '&'.

```
osh> ls &
```

2. Redirect I/O

- Input redirection: use '<' as redirect character

```
osh> sort < input.txt
```

- Output redirection: use '>' as redirect character

```
osh> ls -la > output.txt
```

3. History

- Use '!!' as signal to retrieve the lastest command. Respond "No command in history" if there is no recent command.

```
osh> ls
osh> !!
```

4. Piped commands

- Use '|' as linking character between two commands. No redirection operators supported.

```
osh> ls -la | ps -ael
```

5. Exit

```
osh> exit
```