#include <stdio.h>

#define MAX\_PROCESSES 10

typedef struct {

int pid;

int priority;

int burst\_time;

} Process;

Process processes[MAX\_PROCESSES];

int process\_count = 0;

void add\_process(int pid, int priority, int burst\_time) {

if (process\_count < MAX\_PROCESSES) {

processes[process\_count++] = (Process){pid, priority, burst\_time};

}

}

int find\_highest\_priority\_process() {

int max\_priority\_index = 0;

for (int i = 1; i < process\_count; i++) {

if (processes[i].priority > processes[max\_priority\_index].priority) {

max\_priority\_index = i;

}

}

return max\_priority\_index;

}

void execute\_process(int index) {

printf("Executing process with PID: %d, Priority: %d, Burst Time: %d\n",

processes[index].pid, processes[index].priority, processes[index].burst\_time);

for (int i = index; i < process\_count - 1; i++) {

processes[i] = processes[i + 1];

}

process\_count--;

}

int main() {

add\_process(1, 5, 10);

add\_process(2, 3, 20);

add\_process(3, 8, 5);

add\_process(4, 6, 15);

while (process\_count > 0) {

int highest\_priority\_index = find\_highest\_priority\_process();

execute\_process(highest\_priority\_index);

}

return 0;

}

