The University of Azad Jammu and Kashmir, Muzaffarabad

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Course Name	Operating System
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Lab No	04
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-: Code:-

```
Lab_04_OS_2024-SE-38.cpp
1    #include<iostream>
2    #include<windows.h>
3    using namespace std;
4    int main() {
5        DWORD pid = GetCurrentProcessId();  // Get process ID
6        cout << "Program started. (This is like a process running)" << endl;
7        cout << "Process ID (PID): " << pid << endl;
8        cout << "You can verify this PID in Task Manager (Details tab)." << endl;
9        cout << endl;
10       // Simulate process activity
11       for (int i = 1; i <= 5; i++) {
12           cout << "Step " << i << " executing..." << endl;
13           Sleep(1000);
14       }
15       Sleep(30000); // keeps program running for 30 seconds
16       cout << "\nProgram finished. You can now close Task Manager." << endl;
17       system("pause");
18       return 0;
19   }
20
```

-: Output: -

```
D:\UNIVRERSITY\3RD SEMES1    X    +    v

Program started. (This is like a process running)
Process ID (PID): 11200
You can verify this PID in Task Manager (Details tab).

Step 1 executing...
Step 2 executing...
Step 3 executing...
Step 4 executing...
Step 5 executing...

Program finished. You can now close Task Manager.
Press any key to continue . . .
```

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-: Task Manager: -

Name	PID	Status	User name	CPU	Memory (ac...	Architec...	Description
devcpp.exe	14696	Running	Kamal Ali A...	00	27,864 K	x86	Dev-C++ IDE
DiagsCap.exe	3276	Running	SYSTEM	00	17,272 K	x64	DiagsCap
dwm.exe	13528	Running	DWM-8	00	104,600 K	x64	Desktop Window Mana...
esif_uf.exe	6032	Running	SYSTEM	00	756 K	x64	Intel(R) Dynamic Platfor...
explorer.exe	10244	Running	Kamal Ali A...	00	139,940 K	x64	Windows Explorer
FileCoAuth.exe	3804	Running	Kamal Ali A...	00	5,204 K	x64	Microsoft OneDriveFile ...
fontdrvhost.exe	1148	Running	UMFD-0	00	1,148 K	x64	Usermode Font Driver ...
fontdrvhost.exe	3756	Running	UMFD-8	00	2,832 K	x64	Usermode Font Driver ...
HotKeyServiceUWP.exe	4504	Running	SYSTEM	00	9,668 K	x64	HP Hotkey UWP Service
HPAudioAnalytics.exe	14748	Running	SYSTEM	00	1,736 K	x64	HP Hotkey UWP Service
ibtsiva.exe	6076	Running	SYSTEM	00	640 K	x64	Intel(R) Wireless Blueto...
igfxCUIService.exe	2584	Running	SYSTEM	00	1,268 K	x64	igfxCUIService Module
igfxEM.exe	9572	Running	Kamal Ali A...	00	2,472 K	x64	igfxEM Module
IntelCpHDCPSvc.exe	1260	Running	SYSTEM	00	840 K	x64	Intel HD Graphics Driver...
IntelCpHeciSvc.exe	2348	Running	SYSTEM	00	1,036 K	x64	IntelCpHeciSvc Executa...
Lab_04_OS_2024-SE-...	11200	Running	Kamal Ali A...	00	372 K	x64	Lab_04_OS_2024-SE-38
LanWlanWwanSwitchi...	6588	Running	SYSTEM	00	1,660 K	x64	HP LAN/WLAN/WWAN ...
LockApp.exe	13652	Suspended	Kamal Ali A...	00	0 K	x64	LockApp.exe
Lsalso.exe	608	Running	SYSTEM	00	1,364 K	x64	Credential Guard & VBS...
lsass.exe	756	Running	SYSTEM	00	7,772 K		Local Security Authority...
MicrosoftEdgeUpdat...	12784	Running	SYSTEM	00	1,072 K	x86	Microsoft Edge Update
MicTray64.exe	5364	Running	Kamal Ali A...	00	684 K	x64	MicTray
MpDefenderCoreServ...	6132	Running	SYSTEM	00	7,028 K		Antimalware Core Service

-: Flowchart: -

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