## C Program to Shutdown Computer

In this article, you will learn and get code on shutting down your computer system using a C program. The program to shutdown your system is given for both *windows* and *Linux* users. Here are the list of programs available over here:

- Shutdown your Windows 7,8,10 based System
- Shutdown your System Immediately
- Shutdown your Windows XP based System
- Shutdown your Linux based System

**Important -** Before executing any program given below, be sure to save all the opened file in your computer system. Because after executing the program, your system gets shutdown and all the unsaved documents may gets lost.

Now let's move on to the programs.

#### **Shutdown Computer in C**

To shutdown your computer using C programming, just call the **system()** function that will call the **cmd** (for windows) or **terminal** (for Linux) to shutdown your computer.

Now let's go through the one by one C programming code to shutdown your computer for all platforms such as Windows 7, Windows 8, Windows 10, Windows XP, or Linux based. Let's first start with, how to shutdown your computer using C programming code for Windows 7, 8 and 10 users.

#### **Shutdown Computer for Windows 7,8,10**

This C program will shutdown or turn off your computer system. This program is for Windows users, that is, for windows 7, windows 8, and windows 10 users.

```
#include<stdio.h>
#include<stdlib.h>
int main()
{
    system("C:\\Windows\\System32\\shutdown /s");
```

```
return 0;
```

**Note -** By default, the function system() that calls the shutdown file from the path **C:\Windows\\System32\** will shutdown your computer system after 30 seconds

Therefore, the program given below uses the timer to shutdown as soon as possible.

## **Shutdown System Immediately**

This program shutdown the computer system in 0 seconds. That is, here the timer is set to 0 seconds, so that your system gets turned off immediately.

```
#include<stdio.h>
#include<conio.h>
int main()
{
    system("C:\\Windows\\System32\\shutdown /s /t 0");
    return 0;
}
```

## **Shutdown Windows XP based System**

If you have an Operating system named **Windows XP** installed in your laptop or PC, then following program is for you:

```
#include<stdio.h>
#include<stdlib.h>
int main()
{
    char ch;
    printf("Do You want to Shutdown your Computer (y/n): ");
    scanf("%c", &ch);
    if(ch=='y' || ch=='Y')
        system("C:\\Windows\\System32\\shutdown -s");
    return 0;
}
```

Here this program asks from user, whether he/she wants to shutdown his/her computer system or not. If want to shutdown, then press  $\mathbf{y}$ , otherwise press any other key.

#### C Program to Shutdown Computer for Linux User

This is the last program, that is created for Linux user. So that if any Linux user is reading this article, then they can also find the code in C to shutdown his/her Linux based system:

```
#include<stdio.h>
int main()
{
    system("shutdown -P now");
    return 0;
}
```

**Note** - To shutdown your computer (for Linux users), you need to be logged in as <u>root user</u>. Or, to execute the above program, you must have to be logged in as <u>root user</u>. Otherwise, you will get the an error message like <u>shutdown</u>: Need to be <u>root</u>

#### Set timer before Shutdown for Linux User

You can also specifies the timer to shutdown your Linux based system in given (or defined) time. The above program uses <u>now</u> to shutdown the system right now. But in place of *now*, you can specify the timer. Here is the syntax:

```
system("shutdown -P number of minutes");
For example,
system("shutdown -P 5");
```

will shutdown your system after 5 five minutes of executing the program.

# Java Program to Shutdown and Restart Computer

This article is created to cover multiple programs in Java, to shutdown or restart the computer system. Here are the list of programs included in this article:

• Shutdown computer after 5 seconds using Java

- Shutdown computer after given time using Java
- Restart computer after 5 seconds using Java
- Restart computer after given time using Java

To shutdown computer in Java programming, you have to use the command **shutdown -s**. You can also specify the time in seconds, after which you want to turn off or shutdown the PC, using **shutdown -s -t seconds**. Where **seconds** refers to the number of seconds.

**Note -** To shutdown the computer, use **shutdown -s**. To restart the computer, use **shutdown -r**.

**Important** - Be sure to close all unsaved files and windows, before executing the program given below, to shutdown or restart the computer system.

## **Shutdown Computer after 5 Seconds in Java**

The question is, write a Java program to shutdown the computer after 5 seconds. Answer to this question, is the program given below:

```
import java.io.*;

public class CodesCracker
{
    public static void main(String[] args)
    {
        Runtime runtime = Runtime.getRuntime();
        try
        {
            System.out.println("Shutting down the PC after 5 seconds.");
            runtime.exec("shutdown -s -t 5");
        }
        catch(IOException e)
        {
            System.out.println("Exception: " +e);
        }
    }
}
```

The sample output produced by this program is:

Shutting down the PC after 5 seconds.

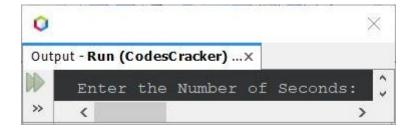
and the PC will get shutdown after 5 seconds.

#### **Shutdown Computer after Given Time (in Seconds)**

This program receives the number of seconds from user at run-time of the program, to shutdown the computer after the given number of seconds.

```
import java.util.Scanner;
import java.io.*;
public class CodesCracker
  public static void main(String[] args)
      Scanner scan = new Scanner(System.in);
      System.out.print("Enter the Number of Seconds: ");
      int seconds = scan.nextInt();
      Runtime r = Runtime.getRuntime();
         System.out.println("Shutting down the PC after " +seconds+"
seconds.");
         r.exec("shutdown -s -t " +seconds);
      }
      catch(IOException e)
         System.out.println("Exception: " +e);
   }
}
```

The snapshot given below shows the initial output produced by above program, on shutting down the computer after given number of seconds:



Now type the number of seconds and press ENTER key to initiate the shutdown operation after that number of seconds. For example, type **60** and press ENTER key to shutdown PC after 60 seconds.

## **Restart Computer after 5 Seconds in Java**

The only change we need to do, from the program given in the section *Shutdown Computer after 5 Seconds in Java*, is to change the code from **shutdown -s -t** to **shutdown -r -t**, to restart the computer after 5 seconds. Here is the complete version of the program.

```
import java.io.*;

public class CodesCracker
{
    public static void main(String[] args)
    {
        Runtime r = Runtime.getRuntime();
        try
        {
            r.exec("shutdown -r -t 5");
            System.out.println("Restarting the Computer after 5 seconds.");
        }
        catch(IOException e)
        {
                System.out.println("Exception: " +e);
        }
    }
}
```

## **Restart Computer after Given Seconds**

This is the last program of this article, created to restart the computer after given number of seconds, by user at run-time of the program:

Note - To shutdown or restart PC immediately, use shutdown -s -t 0 or shutdown -r -t 0.

**Note -** If you'll not use the time, then by default, the computer will get shutdown/restart after 30 seconds using **shutdown -s** or **shutdown -r**.

## Python Program to Shutdown and Restart Computer

In this article, you will learn and get code in Python, to shutdown or restart the computer system. Here are the list program programs available over here:

- Shutdown Computer
- Shutdown Computer Immediately
- Shutdown Computer in Given Time by User
- Restart Computer
- Restart Computer Immediately
- Restart Computer in Given Time by User
- Shutdown/Restart Computer based on User's Choice
- Shutdown Linux Based System

**Note -** All python programs (on Shutdown/Restart) given in this article, are well-tested and executed. Therefore be sure to save all documents before executing any program given here.

**Caution** - Make sure to save and close all documents before executing any program given below. Because after executing these codes (programs), your system gets shutdown/restart and you can lost your unsaved documents.

To shutdown or restart your computer system (PC or laptop) using a python code, you have to first import the **os** library and then use **os.system()** in this way:

```
os.system("shutdown /s")
```

to shutdown the system. Replace **/s** with **/r** to restart the system. Now let's create the program in Python to do the task.

## **Shutdown Computer using Python**

This python program shutdown your computer system after default time, that is **30** seconds. As soon as you run the program given below, your computer gets shutdown after 30 seconds:

```
import os
os.system("shutdown /s")
```

**Note -** Close all documents before executing this program.

**Note -** The **os** module provides functions to interact with Operating System.

**Note -** The **os.system()** method is used to execute a *command* in a subshell. Here, the *command* is of *string* type.

#### **Shutdown Computer Immediately**

To shutdown the system immediately, provide the timer as 0 second. So that the system gets shutdown within 0 second or immediately as shown in this program:

```
import os
os.system("shutdown /s /t 0")
```

**Note -** The **/t 0** is extra code added in this program (than previous one). Here **/t** stands for timer and **0** indicates **0 second**. Therefore after executing this program, system gets shutdown within 0 second.

#### **Shutdown Computer in Given Time**

This program asks from user to enter the number of seconds to set the timer to shutdown the system:

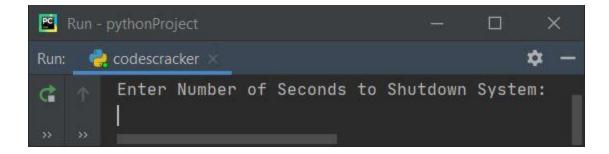
```
import os

print("Enter Number of Seconds to Shutdown System: ")
sec = int(input())

strOne = "shutdown /s /t "
strTwo = str(sec)
str = strOne+strTwo

os.system(str)
```

Here is the initial output produced by this python program:



Now enter the number of seconds say **10** to shutdown the system in 10 seconds.

**Note -** The **str(sec)** is used to convert **sec** (an integer type value) to string. Because to use **+** operator to concatenate two string values. That is, **strOne** and **strTwo**. The second string is the timer value entered by user.

## **Restart Computer using Python**

To restart your computer system using a python program, just replace the **/s** with **/r** from the program given to **shutdown the system**. Rest of the things will be same as shown in the program given below:

```
import os;
os.system("shutdown /r")
```

#### **Restart Computer Immediately**

This python program restarts your computer in 0 second or immediately:

```
import os
os.system("shutdown /r /t 0")
```

#### **Restart Computer in Given Time**

This program is same as the program given in **shutdown computer in given time** section. The only thing to do is, replace the following statement:

```
strOne = "shutdown /s /t "
```

with the statement given below:

```
strOne = "shutdown /r /t "
```

**Note -** Just a matter of **s** and **r**, the whole program gets changed.

Note - Also replace the **Shutdown** word to **Restart**, from print message.

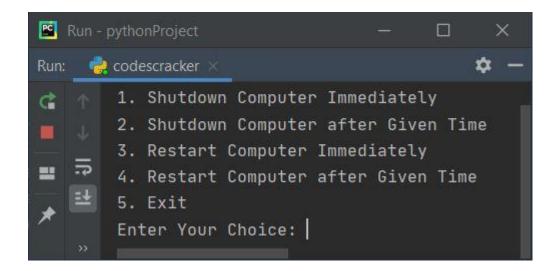
#### Shutdown & Restart based on User's Choice

Here is the combined version of both programs, that is shutdown and restart program in python.

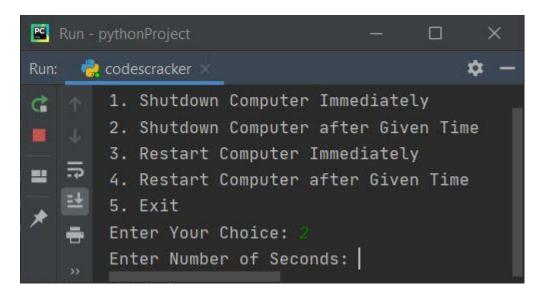
This python program asks from user to enter the choice to perform the desired action. That is, choices are given to perform the things such as shutdown immediately, shutdown in given time, and so on as shown in the program given below:

```
import os
print("1. Shutdown Computer Immediately")
print("2. Shutdown Computer after Given Time")
print("3. Restart Computer Immediately")
print("4. Restart Computer after Given Time")
print("5. Exit")
print(end="Enter Your Choice: ")
choice = int(input())
if choice==1:
   os.system("shutdown /s /t 0")
elif choice==2:
   print(end="Enter Number of Seconds: ")
   sec = int(input())
   strOne = "shutdown /s /t "
   strTwo = str(sec)
   str = strOne+strTwo
   os.system(str)
elif choice==3:
   os.system("shutdown /r /t 0")
elif choice==4:
   print(end="Enter Number of Seconds: ")
    sec = int(input())
   strOne = "shutdown /r /t "
   strTwo = str(sec)
   str = strOne+strTwo
   os.system(str)
elif choice==5:
   exit()
else:
    print("Wrong Choice!")
```

Here is the snapshot of the above python program, giving user, five options to proceed, what he/she wants to do. That is, either shutdown, restart or exit from the program:



If user enters **1** or **3** as choice, then the computer gets shutdown/restart just after pressing the ENTER key. And when user enters **2** as choice, then the program further asks to enter the number of seconds to shutdown the system:



Now enter the input say **180** to shutdown the system after 180 seconds or 3 minutes.

## **Shutdown Linux Based System**

To shutdown linux based system using a Python program, here is the code:

```
import os
os.system("sudo shutdown now")
```

This program shutdown the linux based system immediately.