Main function

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System.Threading.Tasks;

namespace AppointmentConsoleApp
{
class Program
{
static void Main(string[] args)
{
int i = 1;
while (i != 0 )
{
Console.WriteLine("Options:\n\n1.Check availability of date and time and schedule an appointment.\n2.Check
Appointment is in afternoon or not.\n3.Check appointments on that date.\n4.Anniversary date\n5.Exit");
Console.Write("\nSelect one option : ");
int id = Convert.ToInt32(Console.ReadLine());
if (id == 1)
{
Console.WriteLine("\nChecking The Date and Time availability...");
Boolean val = Appointment.HasPassed(new TakeDateTime().appointDateTime());
if (val == true)
{
Console.WriteLine("\nThis Date and Time is not available,enter another time.");
Appointment.Schedule(new TakeDateTime().appointDateTime());
}
else
{
continue;

}
}
else if (id == 2)
{
Boolean b = Appointment.IsAfternoonAppointment(new TakeDateTime().appointDate());
if (b == true)
{
Console.WriteLine("\nAfternoon Appointment.");

}
else
{
Console.WriteLine("\nNo Afternoon Appointment.");
}
}
else if (id == 3)
{
string desc = Appointment.Description(new TakeDateTime().appointDate());
Console.WriteLine(desc);
}
else if (id == 4)
{
Console.WriteLine("\nAnniversary date is on {0}", Appointment.AnniversaryDate());
}
else if (id == 5)
```

```
{
Console.WriteLine("Press any key to exit");
break;

}
else
{
Console.WriteLine("\nWrong Choice!");
continue;
}
i++;
}

Console.ReadKey();
}
}
}
```

Appointment Class

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System.Threading.Tasks;

namespace AppointmentConsoleApp
{
static class Appointment
{
static List<DateTime> list = new List<DateTime>();
static DateTime dt1,dt2,dt3,dt4,dtTm;
static string value,desc,anni;
public static void Schedule(DateTime dateTime1)
{

dt1 = dateTime1;
list.Add(dt1);
Console.WriteLine("Appointment is scheduled for :{0}", dt1.ToString());
}
public static Boolean HasPassed(DateTime dateTime2)
{
dt2 = dateTime2;

foreach(var date in list)
{
if (date.Date == dt2.Date)
dtTm = date.Date;

}
if (dtTm == dt2)
{

return true;
}
else
```

```
{
Console.WriteLine("This Date and Time is available,applying for an appointment for this date and time.");
Schedule(dt2);
return false;
}

}
public static Boolean IsAfternoonAppointment(DateTime dateTime3)
{
dt3 = dateTime3;
TimeSpan start = new TimeSpan(12, 0, 0);
TimeSpan end = new TimeSpan(18, 0, 0);
TimeSpan onlyTime = new TimeSpan(00,0,0);
foreach (var item in list)
{
if(item.Date == dt3)
onlyTime = item.TimeOfDay;

}
if ((onlyTime >= start) && (onlyTime < end))
{
return true;
}
else
{
return false;
}

}
public static string Description(DateTime dateTime4)
{
dt4 = dateTime4;
foreach(var item in list)
{
if(item.Date == dt4)
{
desc = item.ToString();
}
}
return desc;
}
public static string AnniversaryDate()
{
DateTime anvDt = new DateTime(2021, 01, 15);
anni = anvDt.Date.ToString();

return anni;
}
}
}
```

TakeDateTime Class

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System.Threading.Tasks;

namespace AppointmentConsoleApp
{
class TakeDateTime
{

public DateTime appointDateTime()
{
Console.WriteLine("Enter Date for Appointment : DD/MM/YYYY HH:MM:SS");
var line = Console.ReadLine();
var separate = line.Split('/',' ',':');
int day = int.Parse(separate[0]);
int month = int.Parse(separate[1]);
int year = int.Parse(separate[2]);
int hour = int.Parse(separate[3]);
int min = int.Parse(separate[4]);
int seconds = int.Parse(separate[5]);

DateTime date = new DateTime(year, month, day, hour, min, seconds);
return date;

}
public DateTime appointDate()
{
Console.WriteLine("Enter Date : DD/MM/YYYY");
var line = Console.ReadLine();
var separate = line.Split('/', ' ', ':');
int day = int.Parse(separate[0]);
int month = int.Parse(separate[1]);
int year = int.Parse(separate[2]);

DateTime date = new DateTime(year, month, day);
return date;

}
}
}
```