Experiment 5: Write a program to compute previous date, given present date as input and perform decision table testing.

Solution:

```cpp
#include <iostream>
using namespace std;
void getPrevDate(int *day,int *month, int *year)
{
if(*day==1)
{
if(*month==4|| *month==6|| *month==9|| *month==11)
{
*day=31;
*month = *month -1;
}
else if(*month==3)
{
if(*year%4==0)
*day=29;
else
*day=28;
*month = *month -1;
}
else if(*month==1)
{
*day=31;
*month = 12;
*year = *year - 1 ;
}
else if(*month==2)
{
*day=31;
*month = *month -1;
}
```
Software Testing – Lab Manual
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```cpp
}
else
{
else
{
}
*day=30;
*month = *month -1;
*day = *day-1;
}
}
int main()
{
int dd=5,mm=8,yy=2021;
cout<<endl<<"Date : "<<dd<<"/"<<mm<<"/"<<yy;
```

```
getPrevDate(&dd,&mm, &yy);
cout<<endl<<"Previous date : "<<dd<<"/"<<mm<<"/"<<yy;
return 0;
}
```

Conditions are:

C1: dd < 31
C2: dd = 1, mm = 5 || 7 || 8 || 10 || 12
C3: dd = 1, mm = 3 (leap year)
C4: dd = 1, mm = 3 (non-leap year)
C5: dd = 1, mm = 2 || 4 || 6 || 9 || 11
C6: dd = 1, mm = 1

Actions:

A1: dd -= 1
A2: dd = 30, mm -= 1
A3: dd = 29, mm = 2
A4: dd = 28, mm = 2
A5: dd = 31, mm -= 1
A6: dd

Decision Table:

Conditions	R1	R2	R3	R4	R5	R6
1	T					
2		T				
3			T			
4				T		
5					T	
6						T
Actions						
1	T					
2		T				
3			T			
4				T		
5					T	
6						T

Output:

```
Date : 5/8/2021
Previous date : 4/8/2021
```
```
Date : 1/5/2021
Previous date : 30/4/2021
```

```
Date : 1/3/2020
Previous date : 29/2/2020
```
```
Date : 1/3/2021
Previous date : 28/2/2021
```

```
Date : 1/2/2021
Previous date : 31/1/2021
```
```
Date : 1/1/2021
Previous date : 31/12/2020
```