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Experiment No. : 01
Date : 04-01-2023
Topic : GENERATE THE TRUTH TABLE FOR MATHEMATICAL LOGIC

Answer for Practice 01

```
In[1]:= T = BooleanTable[{p, !p}]  
Grid[Prepend[T, {"p", "!p"}], Frame → All, Dividers → All]
```

Out[1]= {{True, False}, {False, True}}

	p	!p
Out[2]=	True	False
	False	True

Answer for Practice 02

```
In[8]:= T = BooleanTable[{p, q, !p && q}]  
Out[8]= {{True, True, False}, {True, False, False}, {False, True, True}, {False, False, False}}
```

```
In[9]:= Grid[Prepend[T, {"p", "q", "!p && q"}], Frame → All, Dividers → All]
```

	p	q	!p && q
	True	True	False
Out[9]=	True	False	False
	False	True	True
	False	False	False

Answer for Practice 03

```
In[13]:= T = BooleanTable[{p, q, p && q || !q}]  
Out[13]= {{True, True, True}, {True, False, True}, {False, True, False}, {False, False, True}}
```

```
In[12]:= Grid[Prepend[T, {"p", "q", (p && q) || !q}], Frame → All, Dividers → All]
```

	p	q	(p && q) !q
	True	True	True
	True	False	True
	False	True	False
Out[12]=	False	False	True