

# Programming I – Tutorial 05 Switch case

## Boolean Operators

Before we can take a look at test conditions we have to know what Boolean operators are. They are called Boolean operators because they give you either true or false when you use them to test a condition. The greater than sign “>” for instance is a Boolean operator. In the table below you see all the Boolean operators:

==	Equal
!	Not
!=	Not equal
>	Greater than
<	Less than
>=	Greater than or equal
<=	Less than or equal
&&	And
	Or

**Highlight the box that contains the correct answer**

#	a	b	c	d	Answer
1					c
2					b
3					d
4					e
5					e
6					e
7					b
8					a
9					e
10					e

#	Question	Answer
1	<p>What will be output when you will execute following c code?</p> <pre>#include&lt;stdio.h&gt; void main(){     int check=2;     switch(check){         case 1: printf("D.W.Steyn");         case 2: printf(" M.G.Johnson");         case 3: printf(" Mohammad Asif");         default: printf(" M.Muralidaran");     } }</pre> <p>Choose all that apply:</p> <p>(A) M.G.Johnson                  (B) M.Muralidaran                  (C) M.G.Johnson Mohammad Asif M.Muralidaran                  (D) Compilation error                  (E) None of the above</p>	c
2	<p>What will be output when you will execute following c code?</p> <pre>#include&lt;stdio.h&gt; #define L 10 void main(){     auto money=10;     switch(money,money*2){         case L: printf("Willian");             break;         case L*2:printf("Warren");             break;         case L*3:printf("Carlos");             break;         default: printf("Lawrence");         case L*4:printf("Inqvar");             break;     } }</pre>	b

	<p>}</p> <p>Choose all that apply:</p> <p>(A) Willian</p> <p>(B) Warren</p> <p>(C) Lawrence Inqvar</p> <p>(D) Compilation error: Misplaced default</p> <p>(E) None of the above</p>	
3	<p>What will be output when you will execute following c code?</p> <pre>#include&lt;stdio.h&gt; enum actor{     SeanPenn=5,     AlPacino=-2,     GaryOldman,     EdNorton }; void main(){     enum actor a=0;     switch(a){         case SeanPenn: printf("Kevin Spacey");             break;         case AlPacino: printf("Paul Giamatti");             break;         case GaryOldman:printf("Donald Shuterland");             break;         case EdNorton: printf("Johnny Depp");     } }</pre> <p>Choose all that apply:</p> <p>(A) Kevin Spacey</p> <p>(B) Paul Giamatti</p> <p>(C) Donald Shuterland</p> <p>(D) Johnny Depp</p> <p>(E) Compilation error</p>	d

4	<p>What will be output when you will execute following c code?</p> <pre>#include&lt;stdio.h&gt; void main(){   char *str="ONE"   str++;   switch(str){     case "ONE":printf("Brazil");       break;     case "NE": printf("Toy story");       break;     case "N": printf("His Girl Friday");       break;     case "E": printf("Casino Royale");   } }</pre> <p>Choose all that apply:</p> <p>(A) Brazil (B) Toy story (C) His Girl Friday (D) Casino Royale (E) Compilation error</p>	e
5	<p>What will be output when you will execute following c code?</p> <pre>#include&lt;stdio.h&gt; void main(){   switch(6){     case 6.0f:printf("Sangakkara");       break;     case 6.0: printf("Sehwag");       break;     case 6.0L:printf("Steyn");       break;     default: printf("Smith");   } }</pre>	e

	<p>Choose all that apply:</p> <p>(A) Sangakkara (B) Sehwag (C) Steyn (D) Smith (E) Compilation error</p>	
6	<p>What will be output when you will execute following c code?</p> <pre>#include&lt;stdio.h&gt; void main(){     switch(5/2*6+3.0){         case 3:printf("David Beckham");             break;         case 15:printf("Ronaldinho");             break;         case 0:printf("Lionel Messi");             break;         default:printf("Ronaldo");     } }</pre> <p>Choose all that apply:</p> <p>(A) David Beckham (B) Ronaldinho (C) Lionel Messi (D) Ronaldo (E) Compilation error</p>	e
7	<p>What will be output when you will execute following c code?</p> <pre>#include&lt;stdio.h&gt; #define TRUE 1 void main(){     switch(TRUE){         printf("cquestionbank.blogspot.com");     } }</pre>	b

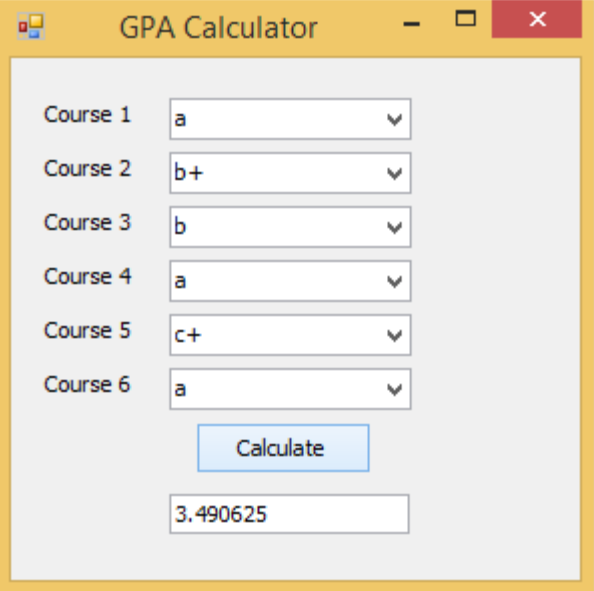
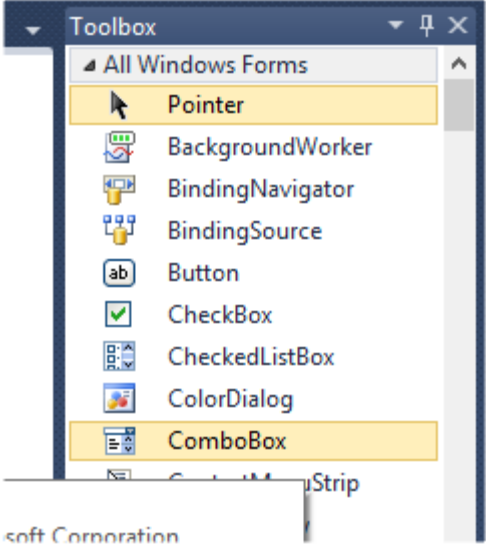


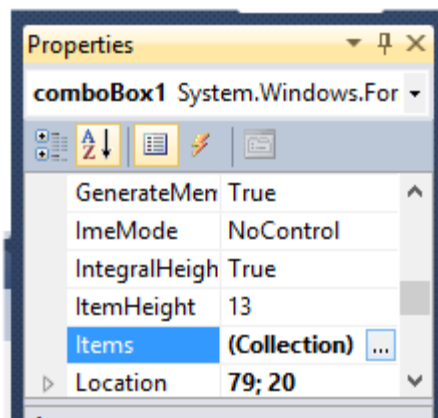
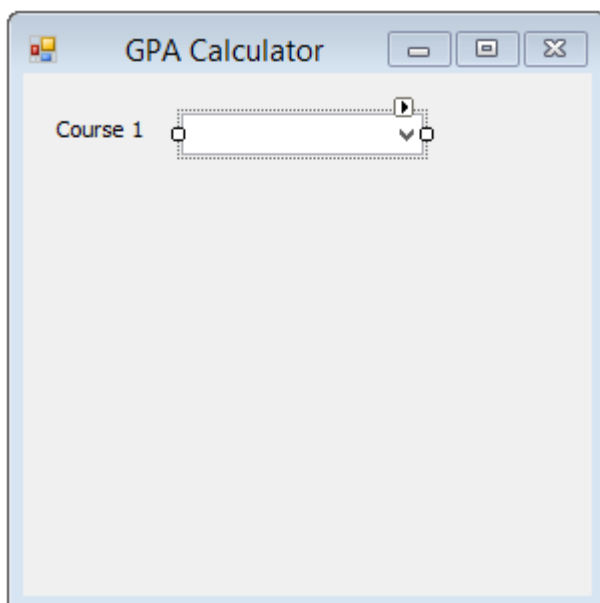
	<pre>} }</pre> <p>Choose all that apply:</p> <p>(A) questionbank.blogspot.com (B) It will print nothing (C) Runtime error (D) Compilation error (E) None of the above</p>	
8	<p>What will be output when you will execute following c code?</p> <pre>#include&lt;stdio.h&gt; void main(){     static int i;     int j;     for(j=0;j&lt;=5;j+=2)         switch(j){             case 1: i++;break;             case 2: i+=2;             case 4: i%=2;j=-1;continue;             default: --i;continue;         }     printf("%d",i); }</pre> <p>Choose all that apply:</p> <p>(A) 0 (B) 1 (C) 2 (D) Compilation error (E) None of the above</p>	a

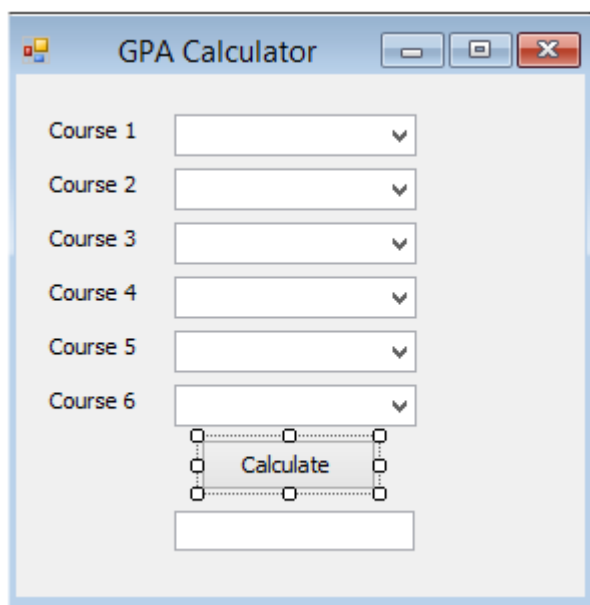
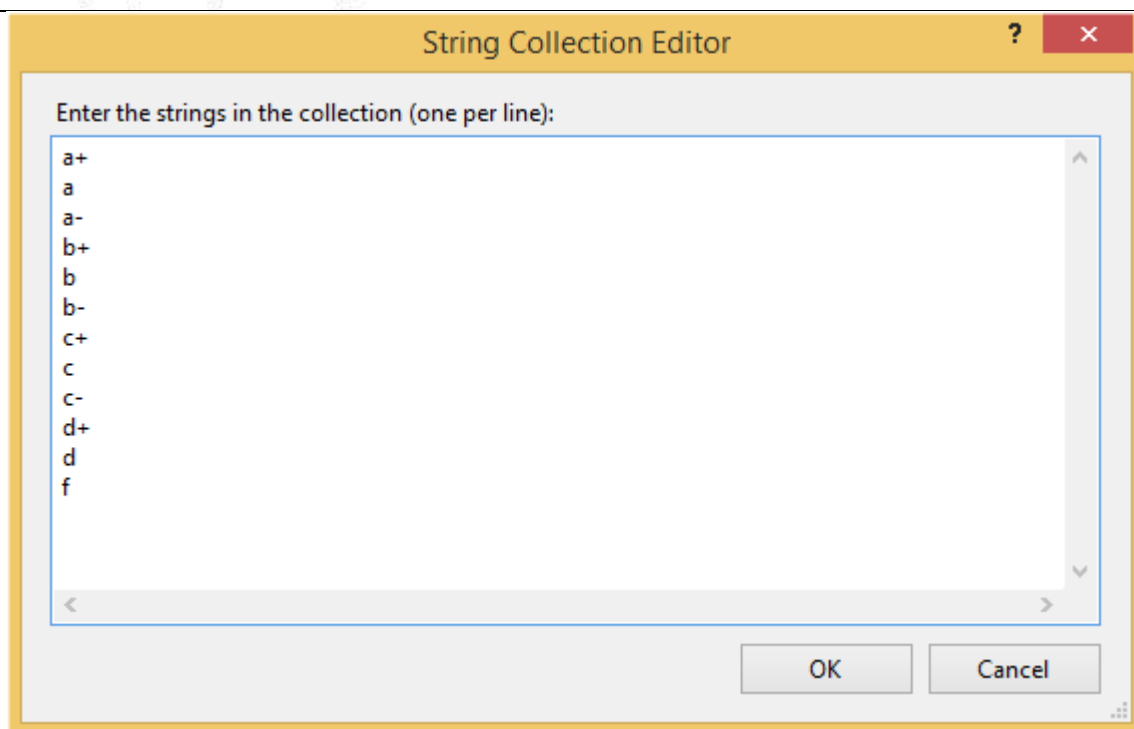


9	<p>What will be output when you will execute following c code?</p> <pre>#include&lt;stdio.h&gt; void main(){     char *str="cquestionbank.blogspot.com";     int a=2;     switch('A'){         case 97:             switch(97){                 default: str+=1;             }         case 65:             switch(97){                 case 'A':str+=2;                 case 'a':str+=4;             }         default:             for(;a;a--)                 str+=8;     }     printf("%s",str); }</pre> <p>Choose all that apply:</p> <p>(A) cquestionbank.blogspot.com (B) blogspot.com (C) com (D) Compilation error (E) None of the above</p>	e
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10	<p>What will be output when you will execute following c code?</p> <pre>#include&lt;stdio.h&gt; void main(){     int a=5;     a=a&gt;=4;     switch(2){         case 0:int a=8;         case 1:int a=10;         case 2:++a;         case 3:printf("%d",a);     } }</pre> <p>Choose all that apply:</p> <p>(A) 8 (B) 11 (C) 10 (D) Compilation error (E) None of the above</p>	e
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Q1	Build a GUI application that accepts letter grade of 6 subjects then calculates Cumulative GPA
GUI	
Solution	







```
float CGPA=0;
////////////////////////////////////
// 1st comboBox
////////////////////////////////////
if(comboBox1->Text=="a+")
    CGPA=4;
else if(comboBox1->Text=="a")
    CGPA=4;
else if(comboBox1->Text=="a-")
    CGPA=3.7;
else if(comboBox1->Text=="b+")
    CGPA=3.3;
else if(comboBox1->Text=="b")
    CGPA=3;
else if(comboBox1->Text=="b-")
    CGPA=2.7;
else if(comboBox1->Text=="c+")
    CGPA=2.3;
else if(comboBox1->Text=="c")
    CGPA=2;
else if(comboBox1->Text=="c-")
    CGPA=1.7;
else if(comboBox1->Text=="d+")
    CGPA=1.3;
else if(comboBox1->Text=="d")
    CGPA=1;
else if(comboBox1->Text=="f")
    CGPA=4;
////////////////////////////////////
// 2nd comboBox
////////////////////////////////////
if(comboBox2->Text=="a+")
    CGPA=(CGPA+4)/2;
else if(comboBox2->Text=="a")
    CGPA=(CGPA+4)/2;
else if(comboBox2->Text=="a-")
    CGPA=(CGPA+3.7)/2;
else if(comboBox2->Text=="b+")
    CGPA=(CGPA+3.3)/2;
else if(comboBox2->Text=="b")
    CGPA=(CGPA+3)/2;
else if(comboBox2->Text=="b-")
    CGPA=(CGPA+2.7)/2;
else if(comboBox2->Text=="c+")
    CGPA=(CGPA+2.3)/2;
else if(comboBox2->Text=="c")
    CGPA=(CGPA+2)/2;
else if(comboBox2->Text=="c-")
    CGPA=(CGPA+1.7)/2;
else if(comboBox2->Text=="d+")
    CGPA=(CGPA+1.3)/2;
else if(comboBox2->Text=="d")
    CGPA=(CGPA+1)/2;
else if(comboBox2->Text=="f")
    CGPA=(CGPA+4)/2;
```



```
////////////////////////////////////  
// 3rd comboBox  
////////////////////////////////////  
if(comboBox3->Text=="a+")  
    CGPA=(CGPA+4)/2;  
else if(comboBox3->Text=="a")  
    CGPA=(CGPA+4)/2;  
else if(comboBox3->Text=="a-")  
    CGPA=(CGPA+3.7)/2;  
  
.....  
.....  
.....  
.....  
else if(comboBox6->Text=="d")  
    CGPA=(CGPA+1)/2;  
else if(comboBox6->Text=="f")  
    CGPA=(CGPA+4)/2;  
  
textBox1->Text=CGPA.ToString();
```