

COMPUTER SYSTEMS AND PROGRAMMING

Assignment # 2



SUBMITTED BY:

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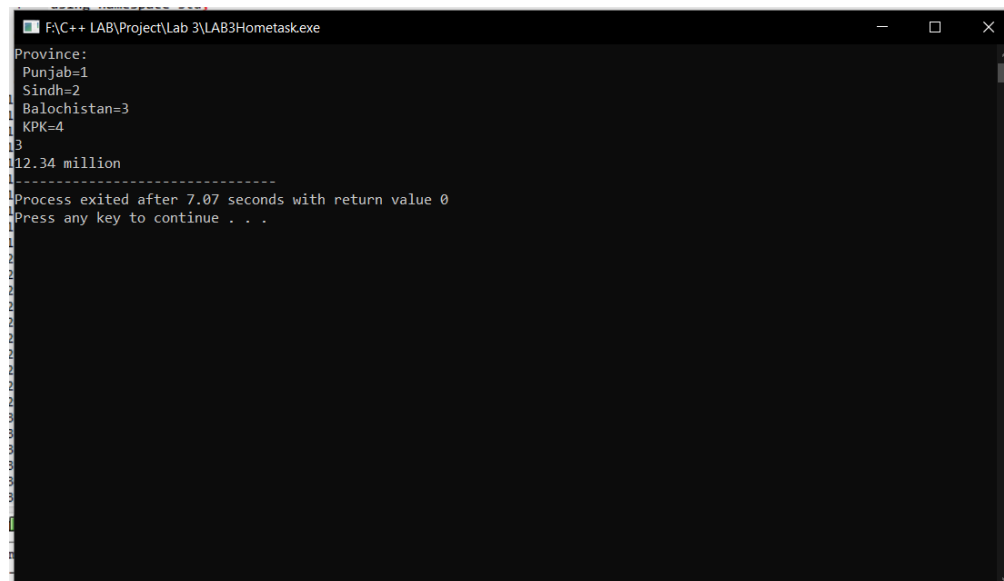
TASK 1:

Write a C++ program to print the total number of populations in Punjab, Sindh, KPK, and Balochistan using a switch case.

CODE:

```
3  #include<iostream>
4  using namespace std;
5  //
6  //HOMETASK:1:Print total number of population in PAKISTAN
7  int main(){
8  int x;
9  cout<<"Province:\n Punjab=1\n Sindh=2\n Balochistan=3\n KPK=4\n";
10 cin>>x;
11 switch(x){
12     case 1:
13         cout<<"110 million";
14         break;
15     case 2:
16         cout<<"47.8 million";
17         break;
18     case 3:
19         cout<<"12.34 million";
20         break;
21     case 4:
22         cout<<"35.53 million";
23         break;
24     default:
25         cout<<"Not Found";
26         break;
27
28
29 }
30 return 0;
31
32 }
```

OUTPUT:



```
F:\C++ LAB\Project\Lab 3\LAB3Hometask.exe
Province:
Punjab=1
Sindh=2
Balochistan=3
KPK=4
12
12.34 million
-----
Process exited after 7.07 seconds with return value 0
Press any key to continue . . .
```

TASK 2

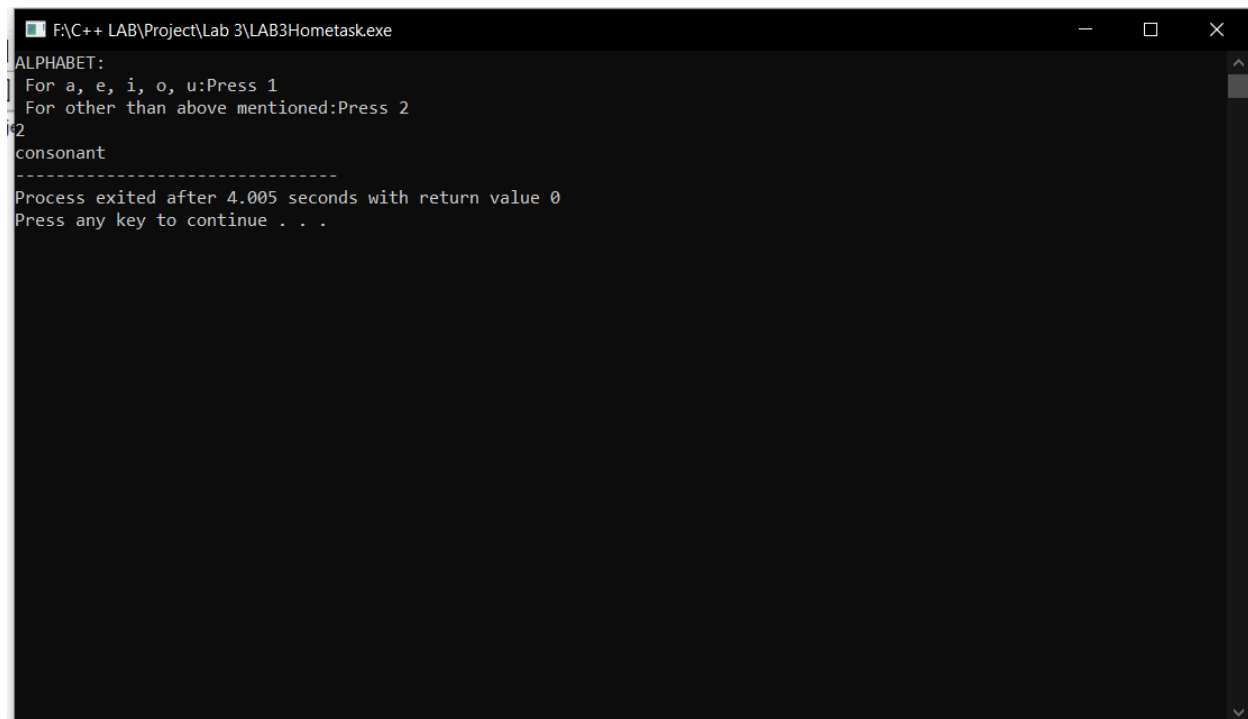
Write a C++ program to check whether an alphabet is a vowel or consonant using a switch case.

CODE:

```
3  #include<iostream>
4  using namespace std;

35 int main(){
36     int C;
37     cout<<"ALPHABET:\n For a, e, i, o, u:Press 1\n For other than above mentioned:Press 2\n";
38     cin>>C;
39     switch(C){
40         case 1:
41             cout<<"Vowel";
42             break;
43         case 2:
44             cout<<"consonant";
45             break;
46     }
47 }
48
49
```

OUTPUT:



```
F:\C++ LAB\Project\Lab 3\LAB3Hometask.exe
ALPHABET:
For a, e, i, o, u:Press 1
For other than above mentioned:Press 2
2
consonant
-----
Process exited after 4.005 seconds with return value 0
Press any key to continue . . .
```

TASK 3

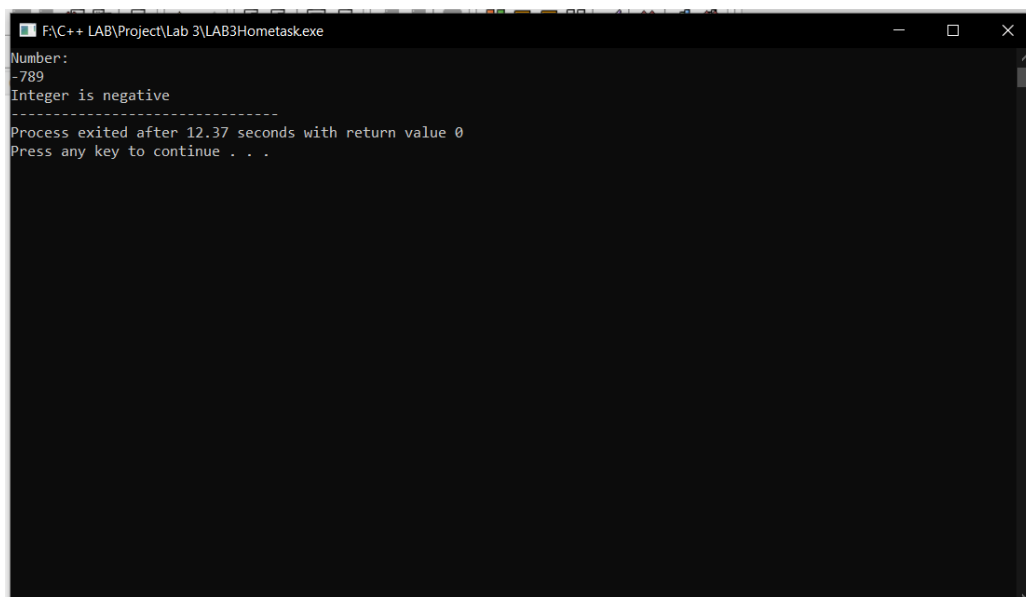
Write a C++ program to check whether a number is positive, negative, or zero using a switch case.

CODE:

```
3  #include<iostream>
4  using namespace std;

51 int main ()
52 {
53     int a,b,c;
54     cout<<"Number:";
55     cin>>a;
56     if (a<0)
57     {
58         b=1;
59     }
60     else if(a>0)
61     {
62         b=2;
63     }
64     else if (a==0)
65     {
66         b=3;
67     }
68     switch (b)
69     {
70     case 1:
71         cout<<"Integer is negative";
72         break;
73     case 2:
74         cout<<"Integer is Positive";
75         break;
76     case 3:
77         cout<<"Integer is equal to 0";
78         break;
79     default:
80         cout<<"Try Again";
81         break;
82     }
83 }
```

OUTPUT:



The screenshot shows a Windows command prompt window titled "F:\C++ LAB\Project\Lab 3\LAB3Hometask.exe". The program prompts "Number:" and the user enters "-789". The output is "Integer is negative". Below this, it says "Process exited after 12.37 seconds with return value 0" and "Press any key to continue . . .".

TASK 4

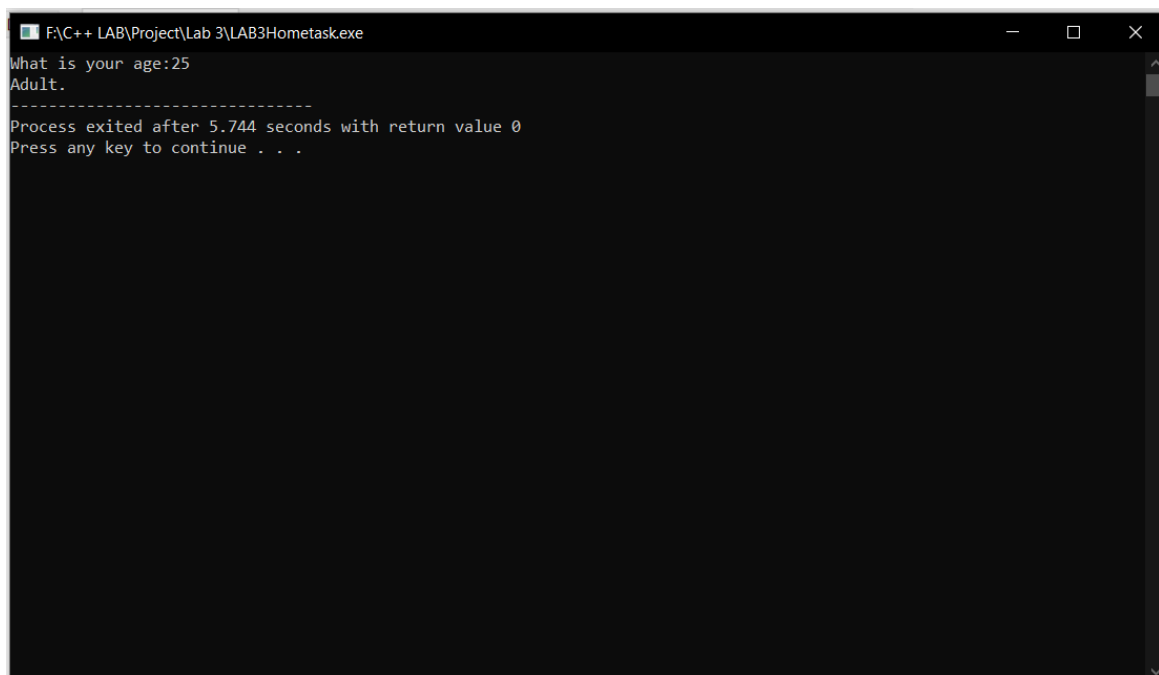
Write a C++ to find out whether a person is an adult, teenager, or child using nested if-else.

CODE:

```
3  #include<iostream>
4  using namespace std;

86 int main ()
87 {
88     int a;
89     cout<<"What is your age:";
90     cin>>a;
91     if(a>=0)
92     {
93         if(a>=0 && a<=12)
94         {
95             cout<<"Child.";
96         }
97         else if(a>12 && a<=19)
98         {
99             cout<<"Teenager.";
100        }
101        else if(a>19)
102        {
103            cout<<"Adult.";
104        }
105        else if(a<0)
106        {
107            cout<<"Try Again";
108        }
109    }
110 }
```

OUTPUT:



The screenshot shows a Windows command prompt window titled "F:\C++ LAB\Project\Lab 3\LAB3Hometask.exe". The program prompts "What is your age:" and the user enters "25". The program outputs "Adult." followed by a dashed line separator. Below the separator, it displays "Process exited after 5.744 seconds with return value 0" and "Press any key to continue . . .".

TASK 5

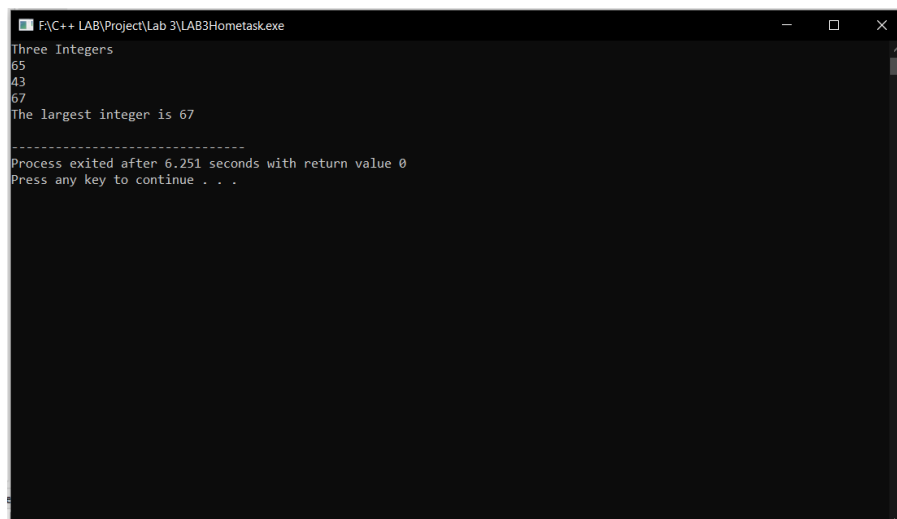
Write a C++ program that takes three number from the user and find the greatest number out of the three numbers using nested if-else statements.

CODE:

```
3  #include<iostream>
4  using namespace std;

112 int main ()
113 {
114     int l,m,n,o;
115     cout<<"Three Integers \n";
116     cin>>o;
117     cin>>m;
118     cin>>n;
119     l=0;
120     if(l==0)
121     {
122         if(o>m && o>n)
123         {
124             cout<<"The largest integer is "<<o<<endl;
125         }
126         else if(m>l && m>n)
127         {
128             cout<<"The largest integer is "<<m<<endl;
129         }
130         else if(n>m && n>l)
131         {
132             cout<<"The largest integer is "<<n<<endl;
133         }
134     }
135     else
136     {
137         cout<<"Try Again.";
138     }
139 }
140
```

OUTPUT:



```
F:\C++ LAB\Project\Lab 3\LAB3Hometask.exe
Three Integers
65
43
67
The largest integer is 67

-----
Process exited after 6.251 seconds with return value 0
Press any key to continue . . .
```

TASK 6

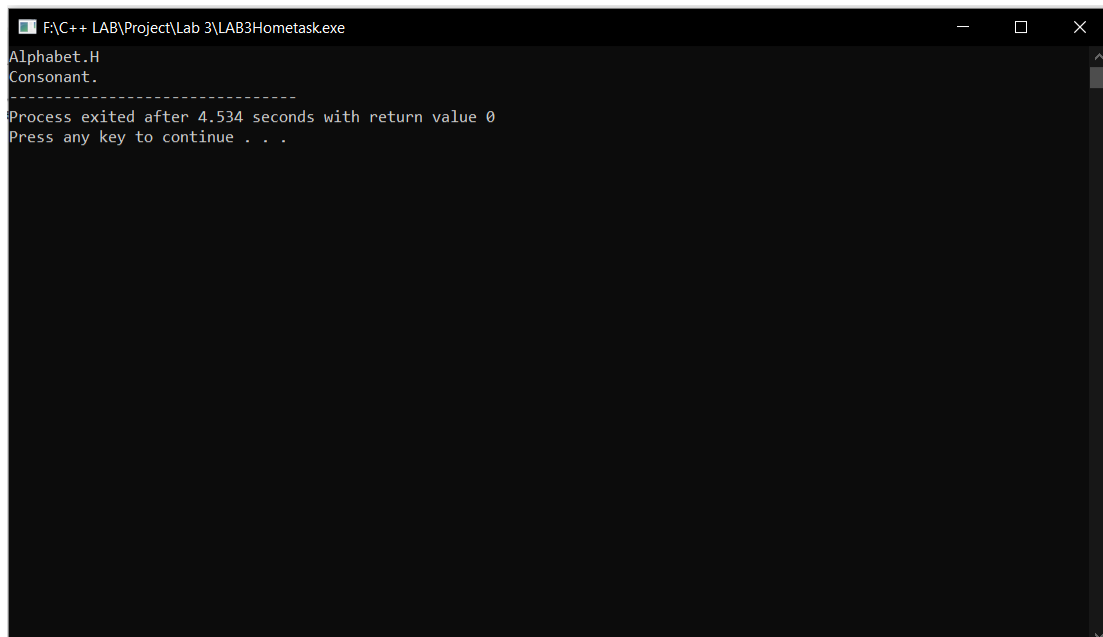
Write a C++ program to check whether the alphabet entered by the user is Vowel or Consonant using nested if-else.

CODE:

```
3  #include<iostream>
4  using namespace std;

142 int main()
143 {
144     char C;
145     int m;
146     cout <<"Alphabet.";
147     cin>>C;
148     m=0;
149     if(m==0)
150     {
151
152         if (C=='a' || C=='e' || C=='i' || C=='o' || C=='u' || C=='A' || C=='E' || C=='I' || C=='O' || C=='U')
153         {
154             cout<<"Vowel.";
155         }
156         else{
157             cout<<"Consonant.";
158         }
159     }
160     else
161     {
162         cout<<"Try Again";
163     }
164 }
```

OUTPUT:



```
F:\C++ LAB\Project\Lab 3\LAB3Hometaskexe
Alphabet.H
Consonant.
-----
Process exited after 4.534 seconds with return value 0
Press any key to continue . . .
```

