DEPARTMENT OF MECHANICAL ENGINEERING

Subject: Fundamentals of Programming
Assignment No. 3
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FIRST PROGRAM

```cpp
#include<iostream>

using namespace std;

int main(){

        char province;

        cout<<"ENTER PROVINCE NAME YOU WANTED TO KNOW POPULATION "<<endl;

        cout<<"p for punjab"<<endl;

        cout<<"s for sindh"<<endl;

        cout<<"k for kpk"<<endl;

        cout<<"b for balochistan"<<endl;

        cin>>province;

        switch(province){

                case 'p':

                        cout<<"THE POPULATION OF PUNJAB IS 127,474,000";

                        break;

                case 's':

                cout<<"THE POPULATION OF SINDH IS 54,858,515";

                break;

                case 'k':

                cout<<"THE POPULATION OF kpk IS 40.8 million";

                break;

                case 'b':

                cout<<"THE POPULATION OF BALOCHISTAN IS 21.7 million";

                break;

        }

return 0;

}
```

```
ENTER PROVINCE NAME YOU WANTED TO KNOW POPULATION
p for punjab
s for sindh
k for kpk
b for balochistan
p
THE POPULATION OF PUNJAB IS 127,474,000
------------------------------
Process exited after 2.426 seconds with return value 0
Press any key to continue . . .
```

```
ENTER PROVINCE NAME YOU WANTED TO KNOW POPULATION
p for punjab
s for sindh
k for kpk
b for balochistan
s
THE POPULATION OF SINDH IS 54,858,515
------------------------------
Process exited after 2.203 seconds with return value 0
Press any key to continue . . .
```

```
ENTER PROVINCE NAME YOU WANTED TO KNOW POPULATION
p for punjab
s for sindh
k for kpk
b for balochistan
k
THE POPULATION OF kpk IS 40.8 million
------------------------------
Process exited after 2.695 seconds with return value 0
Press any key to continue . . .
```

```
ENTER PROVINCE NAME YOU WANTED TO KNOW POPULATION
p for punjab
s for sindh
k for kpk
b for balochistan
b
THE POPULATION OF BALOCHISTAN IS 21.7 million
-------------------------------
Process exited after 1.187 seconds with return value 0
Press any key to continue . . . _
```

SECOND PROGRAM

```cpp
#include<iostream>

using namespace std;

int main(){

        char alphabet;

        cout<<"ENTER ANY ALPHABET"<<endl;

        cin>>alphabet;

        switch(alphabet){

                case 'a':

                case 'e':

                case 'i':

                case 'o':

                case 'u':

                        cout<<"IT IS VOWEL";

                        break;

                        default:
```

```
                    cout<<"IT IS CONSONANT";

        }

}
```

```
ENTER ANY ALPHABET
a
IT IS VOWEL
--------------------------------
Process exited after 2.624 seconds with return value 0
Press any key to continue . . . _
```

```
ENTER ANY ALPHABET
e
IT IS VOWEL
--------------------------------
Process exited after 1.38 seconds with return value 0
Press any key to continue . . . _
```

```
ENTER ANY ALPHABET
u
IT IS VOWEL
--------------------------------
Process exited after 1.379 seconds with return value 0
Press any key to continue . . . _
```

```
ENTER ANY ALPHABET
q
IT IS CONSONANT
--------------------------------
Process exited after 1.664 seconds with return value 0
Press any key to continue . . .
```

THIRD PROGRAM

#include<iostream>

using namespace std;
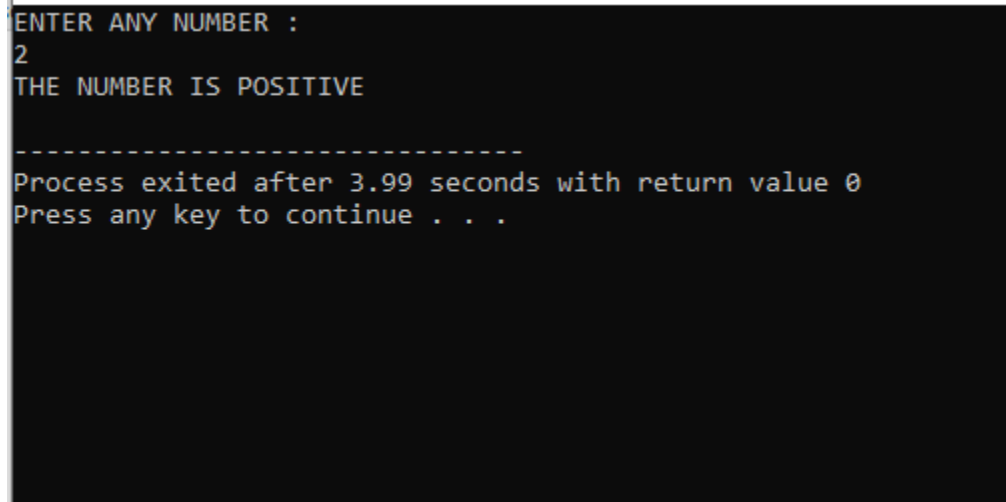
int main(){

      int number;

      cout<<"ENTER ANY NUMBER :"<<endl;

      cin>>number;

      switch (number>0){

            case 1:

            cout<<"THE NUMBER IS POSITIVE"<<endl;

```cpp
            break;
        case 0:

            switch(number<0){

                case 1:
            cout<<"THE NUMBER IS NEGATIVE"<<endl;

            break;

             case 0:

                cout<<"THE NUMBER IS ZERO"<<endl;

                break;

        }

        break;

    }

    return 0;

}
```

```
ENTER ANY NUMBER :
2
THE NUMBER IS POSITIVE

-------------------------------
Process exited after 3.99 seconds with return value 0
Press any key to continue . . .
```

```
ENTER ANY NUMBER :
0
THE NUMBER IS ZERO

--------------------------------
Process exited after 1.313 seconds with return value 0
Press any key to continue . . .
```

```
ENTER ANY NUMBER :
-3
THE NUMBER IS NEGATIVE

--------------------------------
Process exited after 2.269 seconds with return value 0
Press any key to continue . . . _
```

FOURTH PROGRAM

```cpp
#include<iostream>

using namespace std;

int main(){

        int a;

        cout<<"ENTER YOUR AGE IN YEARS"<<endl;

        cin>>a;

        if(a>=20){
```

```cpp
            cout<<"YOU ARE ADULT";

    } else {

    if (a <=19 && a >=13){

            cout<<"YOU ARE STILL TEENAGER";

    } else {

            cout<<"YOU ARE CHILD";

    }

}

}
```

```
ENTER YOUR AGE IN YEARS
12
YOU ARE CHILD
-------------------------------
Process exited after 3.195 seconds with return value 0
Press any key to continue . . .
```

```
ENTER YOUR AGE IN YEARS
15
YOU ARE STILL TEENAGER
-------------------------------
Process exited after 5.607 seconds with return value 0
Press any key to continue . . .
```

```
ENTER YOUR AGE IN YEARS
21
YOU ARE ADULT
---------------------------------
Process exited after 3.111 seconds with return value 0
Press any key to continue . . .
```

FIFTH PROGRAM

```cpp
#include<iostream>

using namespace std;

int main(){

        int m,n,b,greatest;

        cout<<"ENTER FIRST NUMBER"<<endl;

        cin>>m;

        cout<<"ENTER THE SECOND NUMBER"<<endl;

        cin>>n;

        cout<<"ENTER THE THIRD NUMBER"<<endl;

        cin>>b;

 if (m > n) {

   greatest = m;

 } else {

if (n > b) {
```

```
        greatest = n;

    } else {

        greatest = b;

    }

  }

  cout << "The greatest number is: " << greatest << endl;

return 0;
}
```

```
ENTER FIRST NUMBER
12
ENTER THE SECOND NUMBER
23
ENTER THE THIRD NUMBER
34
THE GREATEST NUMBER IS 34

------------------------------
Process exited after 4.324 seconds with return value 0
Press any key to continue . . .
```

```
ENTER FIRST NUMBER
17
ENTER THE SECOND NUMBER
56
ENTER THE THIRD NUMBER
43
THE GREATEST NUMBER IS 56

------------------------------
Process exited after 9.817 seconds with return value 0
Press any key to continue . . .
```

```
ENTER FIRST NUMBER
67
ENTER THE SECOND NUMBER
45
ENTER THE THIRD NUMBER
23
The greatest number is: 67

--------------------------------
Process exited after 4.012 seconds with return value 0
Press any key to continue . . .
```

SIXTH PROGRAM

#include<iostream>

using namespace std;

int main(){

        char alphabet;

        cout<<"ENTER ANY ALPHABET"<<endl;

        cin>>alphabet;

        if(alphabet == 'a' || alphabet == 'e' || alphabet == 'i' || alphabet == 'o' || alphabet == 'u'){

                cout<<"IT IS VOWEL";

        } else {

                cout<<"IT IS CONSONANT";

        }

}

```
ENTER ANY ALPHABET
a
IT IS VOWEL
--------------------------------
Process exited after 15.73 seconds with return value 0
Press any key to continue . . .
```

```
ENTER ANY ALPHABET
w
IT IS CONSONANT
--------------------------------
Process exited after 2.289 seconds with return value 0
Press any key to continue . . .
```