

Institute of Computer Technology
B. Tech Computer Science and Engineering
Subject: ESFP-II (2CSE203)

EXTRA – PRACTICAL

AIM: - To learn about variables data types in C++.

1. Write a C++ program to print the following lines:

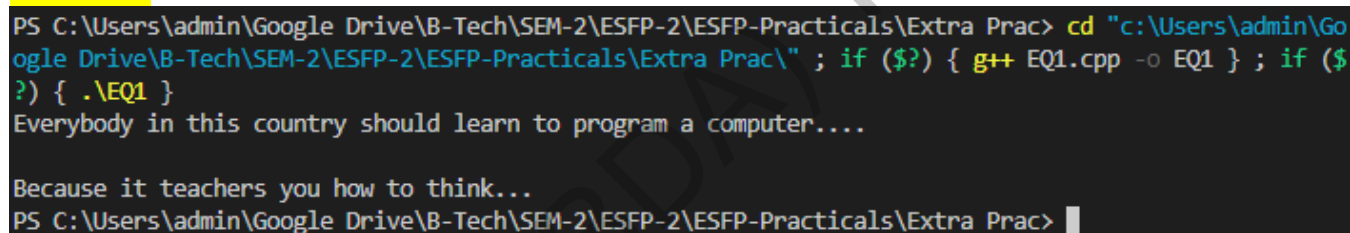
Everybody in this country should learn to program a computer....

Because it teaches you how to think...

CODE:

```
#include <iostream>
using namespace std;
int main(){
    cout<<"Everybody in this country should learn to program a computer....";
    cout<<"\n\nBecause it teachers you how to think...";
    return 0;
}
```

OUTPUT:



```
PS C:\Users\admin\Google Drive\B-Tech\SEM-2\ESFP-2\ESFP-Practicals\Extra Prac> cd "c:\Users\admin\Google Drive\B-Tech\SEM-2\ESFP-2\ESFP-Practicals\Extra Prac\" ; if ($?) { g++ EQ1.cpp -o EQ1 } ; if ($?) { .\EQ1 }
Everybody in this country should learn to program a computer....
Because it teachers you how to think...
PS C:\Users\admin\Google Drive\B-Tech\SEM-2\ESFP-2\ESFP-Practicals\Extra Prac> |
```

2. Take user as input her/his name and print this name on the screen, as shown below. The text from keyboard can be read by using cin>> and to display

the text on the screen you can use cout<<.

i.e. Hello C++!

CODE:

```
#include <iostream>
using namespace std;
int main() {
    char name[30];
    cout<<"Enter your name: ";
    cin>>name;
    cout<<"Your name is: "<<name;
    return 0;
}
```

OUTPUT:

```
PS C:\Users\admin\Google Drive\B-Tech\SEM-2\ESFP-2\ESFP-Practicals\Extra Prac> cd "c:\Users\admin\Google Drive\B-Tech\SEM-2\ESFP-2\ESFP-Practicals\Extra Prac\" ; if ($?) { g++ tempCodeRunnerFile.cpp -o tempCodeRunnerFile } ; if ($?) { .\tempCodeRunnerFile }
Enter your name: Yash
Your name is: Yash
PS C:\Users\admin\Google Drive\B-Tech\SEM-2\ESFP-2\ESFP-Practicals\Extra Prac> █
```

3. To prompt the user to input 3 integer values and print these values in forward and reversed order, as shown below.

Please enter your 3 numbers: 10 20 30

Your numbers forward:

10

20

30

Your numbers reversed:

30

20

10

CODE:

```
#include <iostream>
using namespace std;
int main() {
    int arr[3],i,j,temp;
    cout<<"\nEnter any three numbers: ";

    for (i = 0; i < 3; i++)
    {
        cin>>arr[i];
    }

    cout<<"\nYour numbers forward:\n";
    for (i = 0; i < 3; i++) {
        cout<<arr[i]<<endl;
    }

    cout<<"\nYour numbers reversed:\n";
    for (i = 2; i >= 0; --i) {
        cout<<arr[i]<<endl;
    }
    return 0;
}
```

OUTPUT:

```

PS C:\Users\admin\Google Drive\B-Tech\SEM-2\ESFP-2\ESFP-Practicals\Extra Prac> cd "c:\Users\admin\Go
ogle Drive\B-Tech\SEM-2\ESFP-2\ESFP-Practicals\Extra Prac\" ; if ($?) { g++ EQ3.cpp -o EQ3 } ; if ($
?) { .\EQ3 }

Enter any three numbers: 10 20 30

Your numbers forward:
10
20
30

Your numbers reversed:
30
20
10

PS C:\Users\admin\Google Drive\B-Tech\SEM-2\ESFP-2\ESFP-Practicals\Extra Prac>

```

Post Practical Quiz - Multiple Choice Questions:

1. **What is the additional feature in classes that was not in structures?**

- a) Data members
- b) Member functions**
- c) Static data allowed
- d) Public access specifier

2. **Which is most appropriate comment on following class definition:**

```

class Student
{
int a;
public: float a;
};

```

a) Error: same variable name can't be used twice

- b) Error: Public must come first
- c) Error: data types are different for same variable
- d) It is correct

3. **If a function can perform more than 1 type of tasks, where the function name remains same, which feature of OOP is used here?**

- a) Encapsulation
- b) Inheritance
- c) Polymorphism**
- d) Abstraction

4. Which feature can be implemented using encapsulation?

- a) Inheritance
- b) Abstraction**
- c) Polymorphism
- d) Overloading

5. Which is private member functions access scope?

a) Member functions which can only be used within the class

- b) Member functions which can used outside the class
- c) Member functions which are accessible in derived class
- d) Member functions which can't be accessed inside the class