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F2

SDF II Tutorial 12

**Q1. Fill in the blanks:**

1. function
2. virtual
3. Base class
4. =0
5. derived
6. Base class
7. Abstract Class
8. Pure Virtual fuction
9. override
10. Inherited

**Answer 2:** **Output:**

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**Answer 3:** In C++, the constructor cannot be virtual, because when a constructor of a class is executed there is no virtual table in the memory , means no virtual pointer is defined yet. So the constructor should always be non-virtual.

**Output :**

Error: Constructors cannot be declared virtual

**Answer 4**: Virtual functions are invoked when you have a pointer/reference to an instance of a class. Static functions aren't tied to a particular instance , they're tied to a class. C++ doesn't have pointers-to-class, so there is no scenario in which you could invoke a static function virtually.

**Output:**

Error: member ‘fun’ cannot be both virtual and static.

**Answer 5:**

#include <iostream>

using namespace std;

class class\_A

{

public:

virtual void display()

{

cout<<"Welcome to A \n";

}

};

class class\_B:public class\_A

{

public:

virtual void display()

{

cout<<"Welcome to B \n";

}

};

class class\_C:public class\_B

{

public:

virtual void display()

{

cout<<"Welcome to C \n";

}

};

int main()

{

cout<<"This Code belongs to Shubham\_9919103057"<<endl;

class\_A \*A = new class\_C;

A->display();

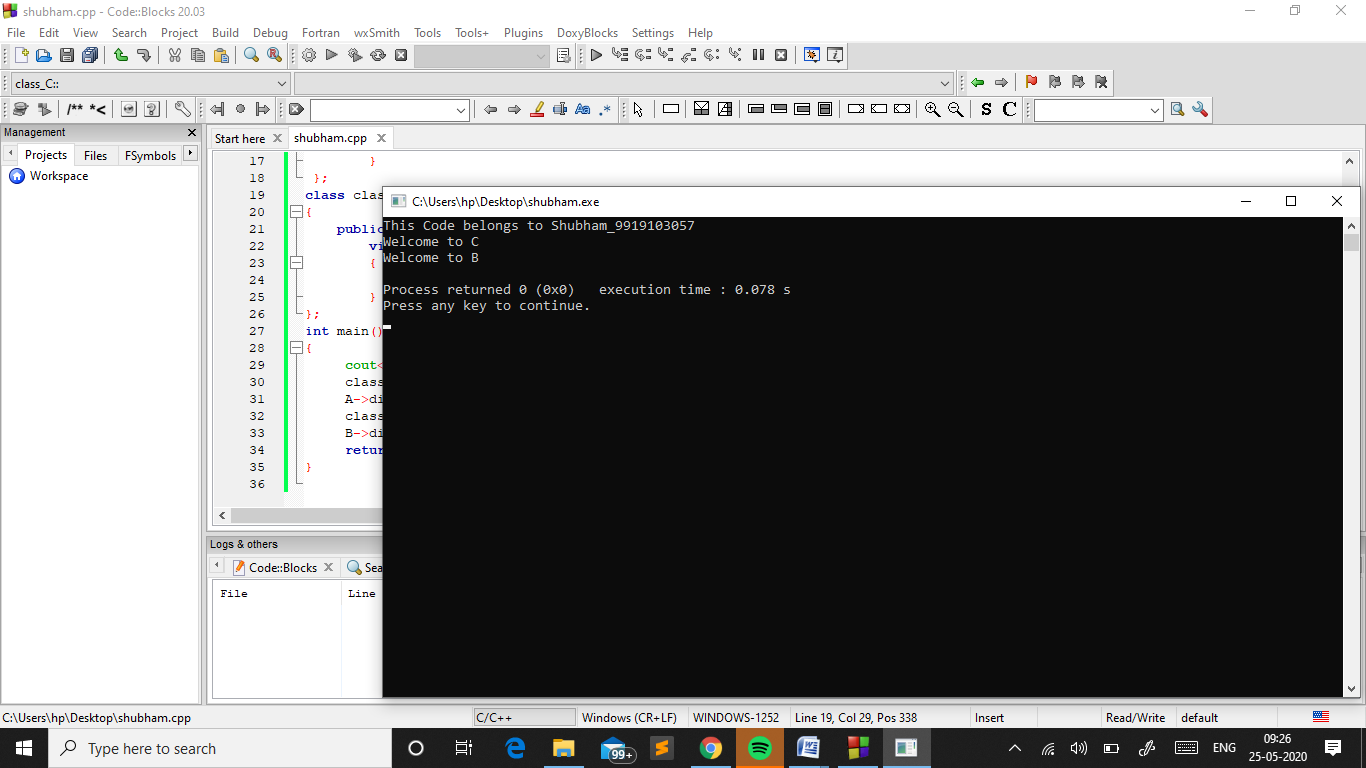
class\_A \*B = new class\_B;

B->display();

return 0;

}

**Output:**

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