

## **ASSIGNMENT NO:-6**

**NAME:-VIPUL VIJAY SURVE**

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**BATCH:- S2**

**QUE:- Ambiguity in Inheritance.**

**(A):-**

**CODE:-**

```
#include <bits/stdc++.h>
```

```
using namespace std;
```

```
class ALPHA
```

```
{
```

```
public:
```

```
    int x;
```

```
    ALPHA(int x)
```

```
    {
```

```
        this->x = x;
```

```
    }
```

```
};
```

```
class BETA
```

```
{
```

```
public:
```

```
    int y;
```

```
    BETA(int y)
```

```
    {
```

```
        this->y = y;
```

```
    }
```

```

};

class GAMMA : public ALPHA, public BETA
{
private:
    int m, n;
public:
    GAMMA(int x, int y, int m, int n) : ALPHA(x), BETA(y)
    {
        this->m = m;
        this->n = n;
    }
    void display()
    {
        cout << x << endl;
        cout << y << endl;
        cout << m << endl;
        cout << n << endl;
    }
};

int main()
{
    GAMMA T(1, 2, 3, 4);

    T.display();

    return 0;
}

```

## OUTPUT:-

```
it@it-OptiPlex-5000:~/Desktop/Hitman _45$ g++ ass6.cpp
it@it-OptiPlex-5000:~/Desktop/Hitman _45$ ./a.out
1
2
3
4
it@it-OptiPlex-5000:~/Desktop/Hitman _45$
```

## (B):-

### CODE:-

```
#include <bits/stdc++.h>

using namespace std;

class square
{
public:
    int s;

    square()
    {
    }

    square(int s)
    {
        this->s = s;
    }

    int Area()
    {
        return s * s;
    }
};
```

```

class rectangle
{
public:
    int l, b;

    rectangle()

    {

    }

    rectangle(int l, int b)

    {

        this->l = l;

        this->b = b;

    }

    int Area()

    {

        return l * b;

    }

};

class shape : public square, public rectangle
{
public:
    shape(int s, int l, int b) : square(s), rectangle(l, b)

    {

    }

};

int main()

{

    shape A(2,3,4);

```

```
square *S;  
  
S = &A;  
  
int sq = S->Area();  
  
rectangle *R;  
  
R = &A;  
  
int ar = R->Area();  
  
cout << "Area of square is :" << sq << endl;  
  
cout << "Area of rectangle is :" << ar << endl;  
  
return 0;  
  
}
```

## OUTPUT:-



```
● it@it-OptiPlex-5000:~/Desktop/Hitman _45$ g++ shape.cpp  
● it@it-OptiPlex-5000:~/Desktop/Hitman _45$ ./a.out  
Area of square is :4  
Area of rectangle is :12  
○ it@it-OptiPlex-5000:~/Desktop/Hitman _45$
```