

In operator overloading, ^ is _____ operator.

CS201 Practical Final Term Current Paper

Masters



Choices:

Unary

☐

Binary

☒

Trinary

☐

Negation

☐

Masters

Masters

```
int main()
{
    int a,digit=78563412;
    a=digit%100;
    digit=digit/100;
    cout<<a;
    a=digit%100;
    digit=digit/100;
    cout<<a;
    a=digit%100;
    digit=digit/100;
    cout<<a;
}
```

Answer:



Question: **25** (Marks: 5)

```
int main()
{
    int a,digit=78563412;
    a=digit%100;
    digit=digit/100;
    cout<<a;
    a=digit%100;
    digit=digit/100;
    cout<<a;
    a=digit%100;
    digit=digit/100;
    cout<<a;
}
```

Masters

Answer:



Question: 26 (Marks: 5)

A program to display an identity matrix is given below. Correct the errors in the program.
[Hint: An identity matrix is a square matrix whose diagonal elements are '1' and remaining elements are '0'.]

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

```
int identityMatrix(num)
{
    int row;

    for (row = 0; row < num; row++)
    {
        for (col = 0; col < num; col++)
        {
            if (row = col)
                cout << 1 << " ";
            else
                cout << 0 << " ";
        }
        cout << endl;
    }
}

int main()
```

Masters

Masters

A code snippet regarding overloading minus and -= operator is given below. Correct errors in the code.

```
Complex Complex::operator - ( Complex c )  
{  
    complex tmp;  
    tmp.real = real - c.real;  
    tmp.imag = imag - c.imag;  
    return tmp;  
}  
Complex Complex::operator -= ( Complex c )  
{  
    real -= c.real ;  
    imag - c.imag ;  
}
```

Question: **29** (Marks: 5)

A code snippet regarding overloading minus and -= operator is given below. Correct errors in the code.

```
Complex Complex::operator - ( Complex c )  
{  
    complex tmp;  
    tmp.real = real - c.real;  
    tmp.imag = imag - c.imag;  
    return tmp;  
}  
Complex Complex::operator -= ( Complex c )  
{  
    real -= c.real ;  
    imag - c.imag ;  
}
```

Masters

Question: **1** (Marks: 1)

The output of the following piece of code is _____.

```
int counter;  
for (counter = 1 ; counter <= 5 ; counter = counter + 1)  
{  
    cout << 2 * counter<<" ";  
}
```

Masters



Which of the following is the correct initialization for 3rd object of the class?



Choices:

☐ Unary

☐ Binary

☐ Trinary

☒ Date mydate[4]=Date (3,3, 2021);



Masters

Introduction to Programming (Practical) (CS201P)

Question: **25** (Marks: 5)

Atte

```
a=digit%100;  
digit=digit/100;  
cout<<a;  
a=digit%100;  
digit=digit/100;  
cout<<a;  
a=digit%100;  
digit=digit/100;  
cout<<a;  
a=digit%100;  
digit=digit/100;  
cout<<a;
```

```
}
```

Answer:



Which of the following is a pre-processor directive?



Choices:

☐

#include



Masters

☐

@include

☐

iostream

☐

#iostream

In C++, when the name of the function remains the same but its behavior is different is known as:

Choices:

☐ Function Overloading



Masters

☐ Recursive

☐ Inline function

☐ Macros

In C++, when the name of the function remains the same but its behavior is different is known as:



Choices:

☐ Structures and Classes

☐ Functions and Pointers

☐ If-else and Loops

☐ Macros

In C++, when the name of the function remains the same but its behavior is different is known as:

Choices:

☐ Structures and Classes

☐ Functions and Pointers

☐ If-else and Loops

☐ Arrays and Functions

In C++, when the name of the function remains the same but its behavior is different is known as:

Choices:

☒ `int i, int * dp = &i;`



Masters

☐ `int x = 0; int *ip = &x;`

☐ If-else and Loops

☐ Arrays and Functions

What will be output of the following piece of code?

```
int square(int n)
{
    return n*n*n;
}
main(){
    cout<<square(1);
}
```



Choices:

1

☒

Masters

2

☐

3

☐

4

☐

What will be the output of the following code ?

```
main()
{
  int num=5;
  {
    int num=6;
    cout<<++num;
  }
}
```

Choices:

5

☐

6

☒

Masters

7

☐

8

☐

What will be the output of the following piece of code?

```
int arr[10]={0,1,2,3,4,5,6,7,8,9};  
int sum=0;  
for(int i=0;i<10;i++)  
{  
    sum=sum+arr[i];  
}  
cout<<sum/10;
```



Choices:

3

☐

4

☐

5

☐

What will be the output of the following piece of code?

```
int arr[10]={0,1,2,3,4,5,6,7,8,9};  
int sum=0;  
for(int i=0;i<10;i++)  
{  
    sum=sum+arr[i];  
}  
cout<<sum/10;
```



Choices:

☐

3

☒

4



Masters

☐

5

☐

6

If the size of the array is ten, the index will be from ___ to ___.



Choices:

☐ 1,10

☒ 0,10

☐ 1,9

☐ 0,9



Masters

In operator overloading, ^ is _____ operator.

Choices:

☐

Unary

☒

Binary



Masters

☐

Trinary

☐

Negation

Which of the following is the correct initialization for 3rd object of the class?



Choices:

☐ Date mydate[2]=Date (10, 10,2021);

☐ Date mydate[1]=Date (10,10,2021);

☐ Date mydate[3]=Date (10,10,2021);

☒ Date mydate[4]=Date (3,3, 2021);



Masters

which type of variable will it be? ,() Suppose you have declared a variable “int i” before main

Choices:

Local



Static



Global



Automatic



Masters

Matrix (Matrix &);

In above statement '&' sign shows that a _____ of the object of type Matrix will be passed.

Choices:

☐ Function

☒ Reference

☐ Class

☐ Value



Masters

A common mistake in templates is the _____ problem.

Choices:

- ☒ Angle bracket  *Masters*
- ☐ Rewriting same code
- ☐ Coding style
- ☐ Square bracket

Templates are type-safe, so the compiler can perform type checking _____ errors occur.



Choices:

☐

After

☒

During compilation



Masters

☐

Before

☐

At run time

For division of a matrix by a scalar, the scalar number divides _____ of the matrix.

Choices:

☒ Each element



Masters

☐ Elements of first row



☐ Elements of last column



☐ Only first element



Constructors and destructors of a class return _____.



Choices:

☒ Reference of an object

☐ A new object of class

☐ Void pointer

☐ Nothing



Masters

What will be the output of the following code?

```
int main () {  
    char str1[] = "Hello";  
    char str2[] = "World!";  
    strcpy(str1, str2);  
    cout << str1;  
}
```

Choices:

☐ Hello World!

☒ World!



Masters

☐ Hello

☐ Hello!

Suppose we have an integer variable named “num” with 5678 as its value then what will be the resulting value for the expression “num%100”?

Choices:

9

☐

78

☒

Masters

56

☐

678

☐

Which of the following operator has higher precedence among others?

Choices:

☐ +

☐ %

☐ 0

☒ *



Masters

What will be the output of the following code?

```
int i = 1;
while(i < 10){
    if (i % 2 == 1)
        cout << i << " ";
    i = i + 3;
}
```

Choices:

1 3 5 7 9

☐

2 4 6 8 10

☐

1 5 9

☐

1 7

☒

Masters

What will be the output of the following code?

```
int i = 1;  
int sum = 0;  
while(i < 5){  
    sum = sum + i;  
    i++;  
}  
cout << sum;
```

Choices:

5



Masters

10



15



25



In bit manipulation of binary systems, if we shift a bit towards left then it means we are _____ that binary value with '2'.



Choices:

☐ Adding

☐ Subtracting

☐ Multiplying

☐ Dividing

In C++, when the name of the function remains the same but its behavior is different is known as:

Choices:

☒ Function Overloading



Masters

☐ Recursive

☐ Inline function

☐ Macros

Which of the following have same functionalities?

Choices:

☐ Structures and Classes

☐ Functions and Pointers

☐ If-else and Loops

☐ Arrays and Functions

A program to display an identity matrix is given below. Correct the errors in the program.
[Hint: An identity matrix is a square matrix whose diagonal elements are '1' and remaining elements are '0'.]

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

int identityMatrix(num)
{
    int row;

    for (row = 0; row < num; row++)
    {
        for (col = 0; col < num; col++)
        {
            if (row = col)
                cout << 1 << " ";
            else
                cout << 0 << " ";
        }
    }
}
```

 *Masters*

Answer:



```
using namespace std;
```

```
int identityMatrix(num)
```

```
{
```

```
    int row;
```

Masters

```
    for (row = 0; row < num; row++)
```

```
    {
```

```
        for (col = 0; col < num; col++)
```

```
        {
```

```
            if (row == col)
```

```
                cout << 1 << " ";
```

```
            else
```

```
                cout << 0 << " ";
```

```
        }
```

```
        cout << endl;
```

```
    }
```

```
}
```

```
int main()
```

```
{
```

```
    int size = 4;
```



A program to create a file named myFile.txt, write alphabets into it, and destroy the previous contents is given below. Correct errors in the program.

```
#include<iostream>
#include <fstream>
using namespace std;
stream rFile;
main()
{
    char rChar;
    rFile.open("myFile.txt", ios::in | ios::out);
    if(rFile)
    {
        cout << "error opening file" << endl;
    }
    for ( rChar ='A'; rChar <='Z'; rChar++)
    {
```

Masters



A code snippet regarding overloading minus and -= operator is given below. Correct errors in the code.

```
Complex Complex::operator - ( Complex c )
{
    complex tmp;
    tmp.real = real - c.real;
    tmp.imag = imag - c.imag;
    return tmp;
}
Complex Complex::operator -= ( Complex c )
{
    real -= c.real ;
    imag - c.imag ;
}
```