Topic : Function Overloading

Q1. What is the output of this program?

#include <iostream>

using namespace std;

void print(int i)

{

cout << i;

}

void print(double f)

{

cout << f;

}

int main(void)

{

print(5);

print(500.263);

return 0;

}

Q2. What do you understand by function overloading? Give example.

Q3. Write a c++ program that uses a function to check a given number is divisible by another number or not.

Q4. What is the output of this program?

#include <iostream>

using namespace std;

int Add(int X, int Y, int Z)

{

return X + Y;

}

double Add(double X, double Y, double Z)

{

return X + Y;

}

int main()

{

cout << Add(5, 6);

cout << Add(5.5, 6.6);

return 0;

}

Q5. What is the output of the following program?

#include <iostream>

using namespace std;

int operate (int a, int b)

{

return (a \* b);

}

float operate (float a, float b)

{

return (a / b);

}

int main()

{

int x = 5, y = 2;

float n = 5.0, m = 2.0;

cout << operate(x, y) <<"\t";

cout << operate (n, m);

return 0;

}

Q6. Write a C++ program that uses area() for the calculation of area of a triangle or a square.

Q7. What is friend function.

Q8. How do you implement inline function?

Q9. C++ does not allow arguments other than the last to be given default values. Justify this statement.

Q10. How is matching done in case of overloaded functions?

Q11. How would you compare default arguments and a function overloading?

Q12. Illustrate the concept of function overloading with the help of an example.

Q13. How does the compiler interpret more than one definitions having same name.

Q14. Write a function that receives two numbers as an argument and display all prime numbers between these two numbers. Call this function from main( ).

Q15. Write a program using function which accept two integers as an argument and return its sum. Call this function from main( ) and print the results in main( )

Q16. Write the output of the following program :

#include <iostream>

using namespace std;

void X(int &A, int &B)

{

A = A + B;

B = A - B;

A = A - B;

}

int main()

{

int a = 4, b = 18;

X(a,b);

cout << a << ", " << b;

return 0;

}

Q17. Write the output of the following program:

#include <iostream>

using namespace std;

int func(int &x, int y = 10)

{

if (x % y == 0)

return ++x;

else

return y--;

}

int main()

{

int p = 20, q = 23;

q = func(p, q);

cout << p << " " << " " << q << endl;

p = func (q);

cout << p << " " << " " << q << endl;

q = func (p);

cout << p << " " << " " << q << endl;

return 0;

}

Q18. Raising a number to a power p is the same as multiplying n by itself p times. Write a function called power that takes two arguments, a double value for n and an int value for p, and return the result as double value. Use default argument of 2 for p, so that if this argument is omitted the number will be squared. Write the main function that gets value from the user to test power function.