Practice Questions based on functions

1	**int** a=3;
	void demo(**int** x, **int** y, **int** &z)
	{
	a+=x;
	y*=a; z=a+y;
	cout<<x<<','<<y<<','<<z<<endl;
	}
	void main()
	{
	int a=2, b=5;
	demo(::a, a, b);
	cout<<::a<<','<<a<<','<<b<<endl;
	}
	output
		2	**int** g=2;
			void myfunction(**int** m, **int** &n,
			int &p)
			{
			g*=m+n; p=g+n;
			n+=m+n+p;
			cout<<m<<','<<n<<','<<p<<endl;
			}
			void main()
			{
			int g=3, l=2;
			myfunction(::g, g, l);
			cout<<::g<<','<<g<<','<<l<<endl;
			myfunction(g, ::g, l);
			}
			output

3	**int** x=2;
	void function(**int** &a, **int** b)
	{
	x+=a+b;
	a+=x+b;
	b+=a+x;
	if (b!=206)
	cout<<x<<','<<a<<','<<b<<endl;
	}
	void main()
	{
	int x=3;
	function(x, 5);
	function(::x, x);
	function(x, ::x);}
	output
		4	**void** fn(**int** &x, **int** y, **int** &z)
			{
			x+=y+z;
			y+=z+x;
			z+=x+y;
			cout<<x<<','<<y<<','<<z<<endl;
			}
			void main()
			{
			int m=4, n=5, *p=&m;
			fn(*p, m, n);
			fn(m, n, *p;
			}
			output

5	**int** m=4;
	void foo(**int** &a, **int** b, **int** &c)
	{
	m+=a+b+c;
	a+=b+c;
	b+=c+a+m;
	c+=a+b;
	m+=b;
	cout<<a<<','<<b<<','<<c<<endl; }
	void main()
	{
	int m=3;
	foo(m, ::m, ::m);
	foo(::m, m, m);}
	output
		6	**int** m=1;
			void func(**int** x, **int** &y, **int** &z)
			{
			m+=x+y+z;
			y+=m+x;
			z+=m+y;
			cout<<x<<','<<y<<','<<z<<endl; }
			void main()
			{
			int m=2;
			func(::m, m, m);
			cout<<::m<<','<<m<<endl;
			func(m, ::m, m); }
			output

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```
int p=1, s=0;
for (int x=1; x<7; x++)
{
s+=p*=x+1;
cout<<p<<" , "<<s<<endl;
}

output
```

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```
int p=3;
void goodday(int &m, int n)
{
p+=m+n;
m+=p;
n+=m;
cout<<m<<','<<n<<','<<p<<endl; }
void main()
{
int p=2;
goodday(p, 5);
cout<<p<<','<<::p<<endl;
goodday(p, ::p);
}
output
```

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```
void myfn(int& x, int y, int& z)
{
x *= y += z;
z += x += y;
cout<<x<<','<<y <<','<<z<< endl;
}
void main()
{
int a = 2, b = 3;
myfn(a, b, a);
myfn(b, a, a); }
output
```

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```
#include<iostream.h>
void main()
{
char ch='C';
 cout<<ch++<<endl;
cout<<int(ch)<<endl;
ch+=32;
cout<<--ch<<endl;
cout<<(int)ch<<endl;
}
output
```

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```
void myfn(int &a, int b)
{
int s=a+b;
a*=s+b;
s+=a+b;
b*=s+a;
s+=a+b+s;
cout<<s<<','<<a<<','<<b<<endl; }
void main()
{
int p=2, q=3;
myfn(p, 5);
cout<<p<<','<<q<<endl;
myfn(q, p);
cout<<p<<','<<q<<endl;
output
```

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```
int p=3;
void paramtest(int& q, int r)
{
p+=q+=r+=p;
p+=q+r;
q+=r+p;
r+=p+q;
cout<<p<<','<<q<<','<<r<<endl; }
void main()
{
int p=5;
paramtest(::p, p);
paramtest(p, ::p);
}
output
```

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```
void swapr( int&a, int&b)
{
 int temp = a;
 a = b;
 b = temp;
 cout<<a<<"\t"<<b<<endl;}
void main()
{
 clrscr();
 int x=5, y=7;
 swapv(x,y);
 cout<<x<<"\t"<<y<<endl;
 swapr(x,y);
 cout<<x<<"\t"<<y<<endl;}
```

output

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```
void swapr( int a, int b)
{
 int temp = a;
 a = b;
 b = temp;
 cout<<a<<"\t"<<b<<endl;}
void main()
{
 clrscr();
 int x=5, y=7;
 swapv(x,y);
 cout<<x<<"\t"<<y<<endl;
 swapr(x,y);
 cout<<x<<"\t"<<y<<endl;}
```

output

Give the output of the following program:

```
#include<iostream.h>
void main()
{
int a=4, b=3;
a=(a+b)*(a-b);
b=2*a*b;
cout<<a<<','<<b<<endl;
a=a+5*b;
b=a*b;
cout<<a<<','<<b<<endl;
a=a+b;
b=4*a+b;
cout<<a<<','<<b<<endl; }
```

output

To find the sum of series given below. Return value of the function is **double**, name of the function is `sumofseq()` and it has two parameters: **double** `x` and **int** `n`. Do not use `pow()` to calculate power of `x`.

$$1-\frac{x}{2!}+\frac{x^2}{4!}-\frac{x^3}{6!}+\frac{x^4}{8!}-\ldots+(-1)^n\frac{x^n}{(2n)!}$$

```
________sumofseq(_______ x,int _)
 {
 _______ s=1, p=1, f=1;
 for (int ___=1; k ___; k++)
 {
 int t=_____;
 p*=_____;
 f*=t*(t___);
 s+=_____;
 }
 return____;
  }
```

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To find sum of a series given below. Return value of the function is **int**, name of the function is sum() and it has an integer parameter n.

(1)+(1+2+3)+(1+2+3+4+5)+(1+2+3+4+5+6+7)+..+(1+2+3+4+5….+2n-1)

```
___ sum(int ___)
{
___ sg=__, s=___;
__ (int k=1; ___<=n__ k++)
{
int t=2*k-1; s+=2*____; _____+=s;
}
   _____________;
  }
```

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```
// function to check palindromic
number

int checkpalidrome(int n)
{
   int ______=0, temp=n;
   while (____=0)
   {
      int digit=______;
      num=10*______+digit;
      _______;
   }
   _________ temp==______;
}
```

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```
//function to displays first n
Prime Nos
#include<_____________>
void generateprime(___ n)
{
   int k=__, count=0;
   while (____<n)
   {
      int x=___, prime=1;
      while (x<__ && prime==___)
         if (__%__==0)
            _______=0;
         else
            ___++;
      if (prime==1)

      __
         cout<<k<<endl;
         count++;
      }
      k++;

   ___
}
void main()
{
   int n;
   cout<<"Input n? "; cin>>n;
   _________________(___);
}
```

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```
// function to Display sum of Prime
between 2 & n
#include<iostream.h>
void sumofprime(___ n)
{
   int ____=0;
   _____ (___ k=2; k<=n; ____)
   {
      int x=_, ______=1;
      _______ (x<k && prime==__)
         _____ (k%x______)
            prime=0;
         else
            _____;
      if (prime==____)
      {
         cout<<k<<endl;
         _____+=_____;
      }
   }
   cout<<"Sum Of Prime="<<______;
}
void main()
{
   int n;
   cout<<"Input n? "; cin>>n;
   sumofprime(n);
}
```

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```
int hcf(____ a, int _____)
{
   _____ r;
   _____
   {
      r=a____b;
      a=____;
      b=___;
   }
   _____ (r____0);
   return ____;
}
```

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```
int lcm(____ a, ____ b)
{
   int r, p=____*_____;
   do
   {
      ____=a%b;
      ____=b;
      _____=r;
   }
   while (r____0);
   return ____/a;
}
```

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```
// function to check Fibonacci no
void checkfibo(int n)
{
   int f1=___, f2=___, fibo=0;
   while (_______<=n)
   {
      int f3=f1+____;
      if (f3___ ___)
         fibo=___;
      f1=___;
      f2=___;
   }
   if (fibo_____ 1)
      cout<<"_________________\n";

   _______
      cout<<"_____________\n";
}
```

```
// Displays Prime Nos between 2 and n
_____ generateprime(int ____)
{
   ____(int k=2; _______; k++)
   _____
      int x=____, prime=1;
      _______ (______ && prime==1)
      {
         if (_____==0)
            prime=0;

         ______
      }
      if (prime==1)
         cout<<k<<endl;

   _____
}
```