National University of Computer and Emerging Sciences, Lahore Campus

Course:	OOP		**Course Code:**	CS217
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Section:			**Roll No.**	
Type	Practice Questions			

Instruction/Notes: •

Question: For the code segment given below, determine output/error. In case of error highlight the exact line that will cause the error.

	Output/Error
| ```cpp
#include<iostream>
using namespace std;
int* SomeFunction(int j, int x)
{
    int* ptr = new int[j];

    for( int i=0; i< j ; i++)
    {
        *(ptr+i)= i*5;
        x=i*5;
        cout<<ptr[i]<<", ";
    }
    cout<<endl;
    return ptr;
}
int main()
{
    int* p;
    int var=90;
    p=var;
    cout<<"Var = "<<var<<endl;
    cout<<"In Main: *p = "<<*p<<endl;

    cout<<"Inside For Loop"<<endl;
    for( int i=0; i< 3 ; i++)
    {
      p = SomeFunction(i+1,var);
    }
    cout<<"Var = "<<var<<endl;
        delete[] p;
    return 0;
}
``` | |

Question: For the code segment given below, determine output/error. In case of error highlight the exact line that will cause the error.

#include <iostream>	Output/Error

using namespace std;
void I_ptr(int *x, int s)
{
   int c=10;
  for (int i=0;i<s;i++)
  {
    *(x+i)=i*c;
    c=c-i;
  }
}
void O_ptr(int *p ,int s)
{
  for (int i=0;i<s;i++)
  {
    cout<<*p<<endl;
    p++;
  }
}
int main()
{
 int size=6;
 int *ptr;
 ptr=new int [6];
 I_ptr(ptr,size);
 cout<<"Printing"<<endl;
 O_ptr(ptr,size);
 	
 delete [] ptr;
  return 0;
}	

Question: For the code segment given below, determine output/error. In case of error highlight the exact line that will cause the error.

Code	Output/Error

<pre>#include <iostream>
using namespace std;
void dd_ptr(int *x, int *&y, int *z)
{
  x = new int;
  y = new int;
  z = new int;
  *x = 2;
cout<<"Inside function "<<endl;
  cout<<" *x = "<<*x<<endl;
  *y = *x * 3 + 3;
  cout<<" *y = "<<*y<<endl;
  *z = *x + *y +10;
  cout<<" *z = "<<*z<<endl;
}
int main()
{
  int *p,*q,*r;
  int l=2,m=3,n;
    p = &l;
    q = &m;
    n = *p * *q;
    r = &n;
  cout<<"Before Function Call "<<endl;
  cout<<" *p ="<<*p<<endl;
  cout<<" *q ="<<*q<<endl;
  cout<<" *r ="<<*r<<endl;
 	
  dd_ptr(p,q,r);
 	
  cout<<"After Function Call "<<endl;
  cout<<" *p ="<<*p<<endl;
    cout<<" *q ="<<*q<<endl;
    cout<<" *r ="<<*r<<endl;
 	
  return 0; }</pre>
	Before Function Call
	 *p =2
	 *q =3
	 *r =6
	Inside function
	 *x = 2
	 *y = 9
	 *z = 21
	After Function Call
	 *p =2
	 *q =9
	 *r =6

Question: For the code segment given below, determine output/error. In case of error highlight the exact line that will cause the error.

```cpp
#include<iostream>
using namespace std;
void main()
{
        int a,b,c;
        int *w , *x, *y, *z;
        z = 0;
        a = 10;
        b = a * 5;
        w = &a;
        x = &b;
        c = *w + *x;
        *z = c;
        cout<<" *w =\t"<<*w<<endl;
        cout<<" *x =\t"<<*x<<endl;
        cout<<" *y =\t"<<*y<<endl;
}
```

Question: Complete the missing code in the program given below.

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

int* SomeFunction(int j)
{
        int* ptr = new int[j];

        for( int i=0; i< j ; i++)
        {
                ptr[i] = i+1;
        }
        return ptr;
}
void main()
{
        int* ptr[3];

        for( int i=0; i< 3 ; i++)
                ptr[i] = SomeFunction(i+1);

        //Write code to print all the data




        //Write code to de-allocate memory (if needed)


}
```

Question: For the code segment given below, determine output/error. In case of error highlight the exact line that will cause the error.

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

int* GetArray()
{
        int size = 10;
        int* aPtr = new int[size];
        cout<<"\n\n\nInitialize and Print Array:\n";
        for(int i = 0 ; i < size ; i++)
        {
                aPtr[i] = i+1;
                cout<<aPtr[i]<<endl;
        }
        delete[] aPtr;
        return aPtr;
}
void main()
{
        int* myArray = GetArray();
        cout << "I am back in main()" << endl;
        cout<<"\n\n\nmyArray[0]:\t"<<myArray[0]<<endl;
}
```