**Pointers Recap exercises**

1. What will happen to these codes?

int a = 100, b = 200;

* int \*p = &a, \*q = &b;
* p = q;

a)b is assigned to a

b)p points to b

c)a is assigned to b

d) q now point to a

1. What will be the output?

* **i**nt a = 15;
* int b = 20;
* int \*c = &b;
* \*c = 15;
* cout << a << " “ << b << endl;

a)15 20

b)20 15

c)15 15

d)20 20

1. . Which of the following gives the memory address of integer variable a?
   1. \*a;
   2. a;
   3. &a;
   4. address(a);
2. What will be the output ?

int a = 20;

int b = 30;

int \*c = &b;

a = \*c;

\*c = \*c + 1;

cout <<a<<” “ <<b<< endl;

a)31 31

b)20 31

c)31 20

d)30 31

1. What is the output of the following program?

#include<iostream>

using namespace std;

int main ()

{

float PI = 3.14;

float \*PIptr;

float r=5, A;

float x;

PIptr=&PI; //PIptr contains the address of PI

x=\*PIptr; // value stored in PI(3.14)is assigned to x.

A=r\*r\*x;

cout<<”The area of circle is”<<A<<endl

return 0;

}

1. Which of the following gives the memory address of variable 'b' pointed by pointer 'a' i.e.

* int b = 10;
* int \*a = &b;

i) a;

ii) \*a;

iii) &a;

iv) address(a);

1. Which is correct?

int k = 20;

int \*ptr = &k;

int \*q = ptr;

(\*q)++;

cout << k << endl;

a)20

b)21

c)Error

d)None of these

1. What is the output?

int k = 60;

int \*ptr = &k;

cout << (\*ptr)++ <<“ “;

cout << k << endl;

a)60 61

b)61 60

c)60 60

d)61 61

1. Which one is correct?

int \*ptr = 0;

int r = 30;

\*ptr = r;

cout << \*ptr << endl;

a)30

b)0

c)Error

d) None of these

1. **Provide the output of the program**

#include<iostream>

using namespace std;

int main()

{

int x;

int \*ptr;

x = 5;

ptr = &x;//

cout << \*ptr;

getchar();

return 0;

}

1. Provide the output of the following program

#include<iostream>

using namespace std;

int main(){

int a = 50;

int \*ptr = &a;

cout<<(\*ptr)++<<endl;

cout<<ptr<<endl;

cout<<a<<endl;

cout<<(\*ptr)++<<endl;

cout<<ptr<<endl;

cout<<\*ptr<<endl;

cout<<a<<endl;

return 0;

}

1. Provide the output

#include <iostream>

using namespace std;

int main()

{

int sum,i;

int a[5]={10,20,30,40,50};

for (sum = \*a, i = 1; i < 5; i++)

sum+= \*(a + i);

cout<<sum<<endl;

return 0;

}

1. What is the output

#include <iostream>

using namespace std;

int main()

{

int sum,i;

int a[5]={10,20,30,40,50};

Int \*p;

p=a;

for (sum = \*a, p = a+1; p < a+5; p++)

sum += \*p;

cout<<sum<<endl;

return 0;

}

1. What is the output?

#include<iostream>

using namespace std;

int main(){

int a = 7;

int b = 17;

int \*c = &b;

\*c = 7;

cout<<”a=”<<a<<" and b= "<<b<<endl;

c = &a;

\*c = 17;

cout<<”Then a=”<<a<<" and b="<<b<<endl;

cout<<\*c<<endl;

return 0;

}

1. What is the output?

#include<iostream>

using namespace std;

int main(){

int a = 50;

int \*ptr = &a;

cout<<(\*ptr)++<<endl;

cout<<a<<endl;

int \*q=ptr;

(\*q)++;

cout<<(\*ptr)++<<endl;

cout<<\*q<<endl;

cout<<a<<endl;

return 0;

}