Q1 : Write a program to find the product of two numbers using pointers.

pointer > assignment1.cpp > ...

```cpp
#include<iostream>
using namespace std;
int main(){
    int x,y;
    cin>>x>>y;
    int*ptr1 =&x;
    int*ptr2 =&y;
cout<<(*ptr1)*(*ptr2);
}
```

Q2 : `int *p, q;`

1. p is a pointer and q is an integer.
2. p and q both are pointers.
3. P and q both are integers.
4. Syntax is incorrect.

Solution :
p is a pointer and q is an integer. * is grouped with variables, not data types.

Q3: Find the output of the following code snippet.

```
int a = 10, b = 20;
int *ptr = &a;
b = *ptr + 1;
ptr = &b;
cout << *ptr << ' ' << a << ' ' << b;
```

1. 11 11 10
2. 10 10 10
3. 11 10 11
4. 10 11 10

Solution : 11 10 11
ptr points to a, b = a + 1 , so ptr points to b

Q4: Find the output of the following code snippet.

```
int a = 15, b = 20;
int *ptr = &a;
int *ptr2 = &b;
*ptr = *ptr2;
```

1. ptr now points to b
2. ptr2 now points to a
3. a gets value of b
4. b gets value of a

Solution :
a gets the value of b

Q5: Is the following program snippet correct?

```
int a = 10, b = 20;
int *ptr;
*ptr = 5;
```

Solution :
The program is correct and will compile but might result in runtime error.This is because ptr will have a garbage address which might even point to a location which does not belong to our program and hence might result in Segmentation Fault when we are trying to access it.