Homework Questions of 3rd March 2023

Q1 Why size of pointer is fixed?

Whenever we apply size of operator on the pointer of any data type, the answer will come out to be same. Pointers will have size of 2 bytes on a 16 bit system, 4 bytes on a 32 bit system & 8 bytes on 64 bit system.

```
int a = 5;
int * ptr = &a;
cout << sizeof (ptr);

char ch = 'a';
char * ptr1 = &ch;
cout << sizeof (ptr1);

double d = 1.26;
char * ptr2 = &d;
cout << sizeof (ptr2);
```

I am assuming that the above codes are run on 64 bit system & hence the answer to all of these will be 8 bytes as the data which is stored inside the pointer is an address & hence 8 bytes always.