

DS B Quiz 1 - Solution

Question 1

Given Code

```
double* realPtr;  
long* integerPtr;  
integerPtr = realPtr;
```

Error

- Type mismatch: assigning a `double*` to a `long*`

Correction

```
double* realPtr;  
double* integerPtr;  
integerPtr = realPtr;
```

Question 2

Given Code

```
int* x, y;  
x = y;
```

Error

- `x` is a pointer, while `y` is an integer
- Cannot assign an `int` value to an `int*`

Correction

```
int *x, *y;  
x = y;
```

Question 3

Given Code

```
double x = 19.34;  
double xPtr = &x;  
cout << xPtr << endl;
```

Error

- Cannot assign an address value to a `double` (`*` is missing).

Correction

```
double x = 19.34;
double* xPtr = &x;
cout << *xPtr << endl;
```

Question 4

Given Code

```
char s[] = "this is a character array";
for(; *s != '\0'; ++s)
    cout << *s << ' ';
```

Error

- Array name cannot be incremented

Correction

```
char s[] = "this is a character array";
for(char* p = s; *p != '\0'; ++p)
    cout << *p << ' ';
```

Question 5

Given Code

```
int* number;
cout << *number << endl;
```

Error

- An uninitialized pointer is dereferenced

Correction

```
int n = 10;
int* number = &n;
cout << *number << endl;
```