

# PLAYING WITH POINTERS - QUESTION 1

WHAT WILL BE THE OUTPUT OF THESE LINES OF CODE?

HINT: NOTE THE ADDRESS OF OPERATOR ON THE INTEGER VARIABLES

```
int length = 10;
int breadth = 5;

int *length_ptr = &length;
int *breadth_ptr = &breadth;

// What will this print to screen? Specify the exact values.
printf("Printing dereferenced pointers:\n");
printf("%d\n", *length_ptr);
printf("%d\n", *breadth_ptr);
```

## ANSWER

```
Printing dereferenced pointers:
10
5
```

HINT: NOTE THE DEREFERENCING OF THE POINTER, THIS MEANS WE'RE ACCESSING THE VALUE

# PLAYING WITH POINTERS - QUESTION 2

WHAT WILL BE THE OUTPUT OF THESE LINES OF CODE?

```
int length = 10;
int breadth = 5;

int *length_ptr = &length;
int *breadth_ptr = &breadth;

// What will this print to screen? Exact values are not needed.
printf("Printing pointers:\n");
printf("%p\n", length_ptr);
printf("%p\n", breadth_ptr);
```

## ANSWER

```
Printing pointers:
0x7fff5d4efb9c
0x7fff5d4efb98
```



HINT: NOTE THAT WE **\*DO NOT\***  
REFERENCE THE VALUE OF THE  
POINTER

# PLAYING WITH POINTERS - QUESTION 3

WHAT WILL BE THE OUTPUT OF THESE LINES OF CODE?

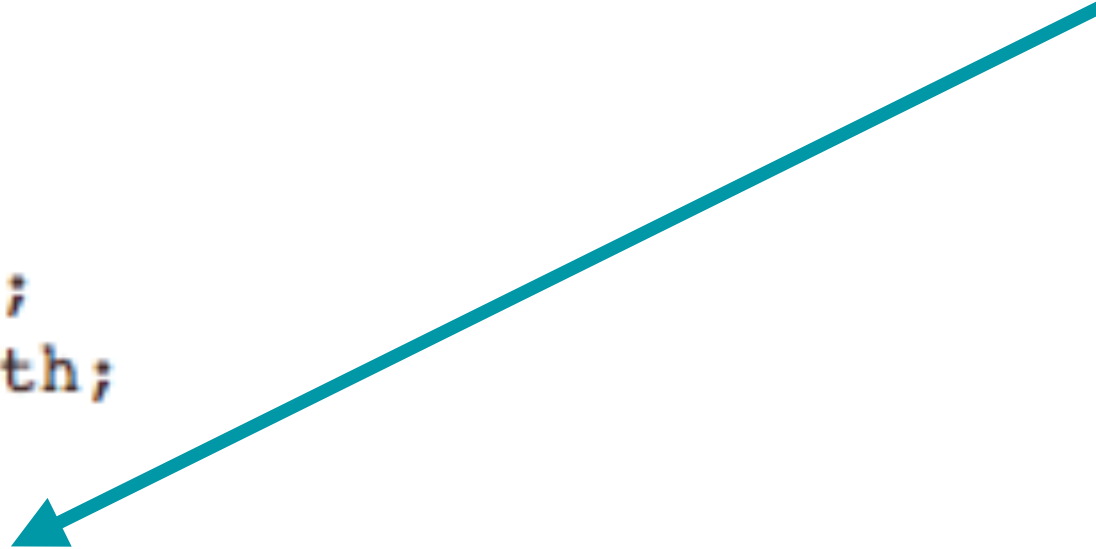
```
int length = 10;
int breadth = 5;

int *length_ptr = &length;
int *breadth_ptr = &breadth;

int *test = length_ptr;
*test = 25;

// What will this print to screen?
printf("Printing length and bread values for the first time:\n");
printf("Length: %d\n", length);
printf("Breadth: %d\n", breadth);
```

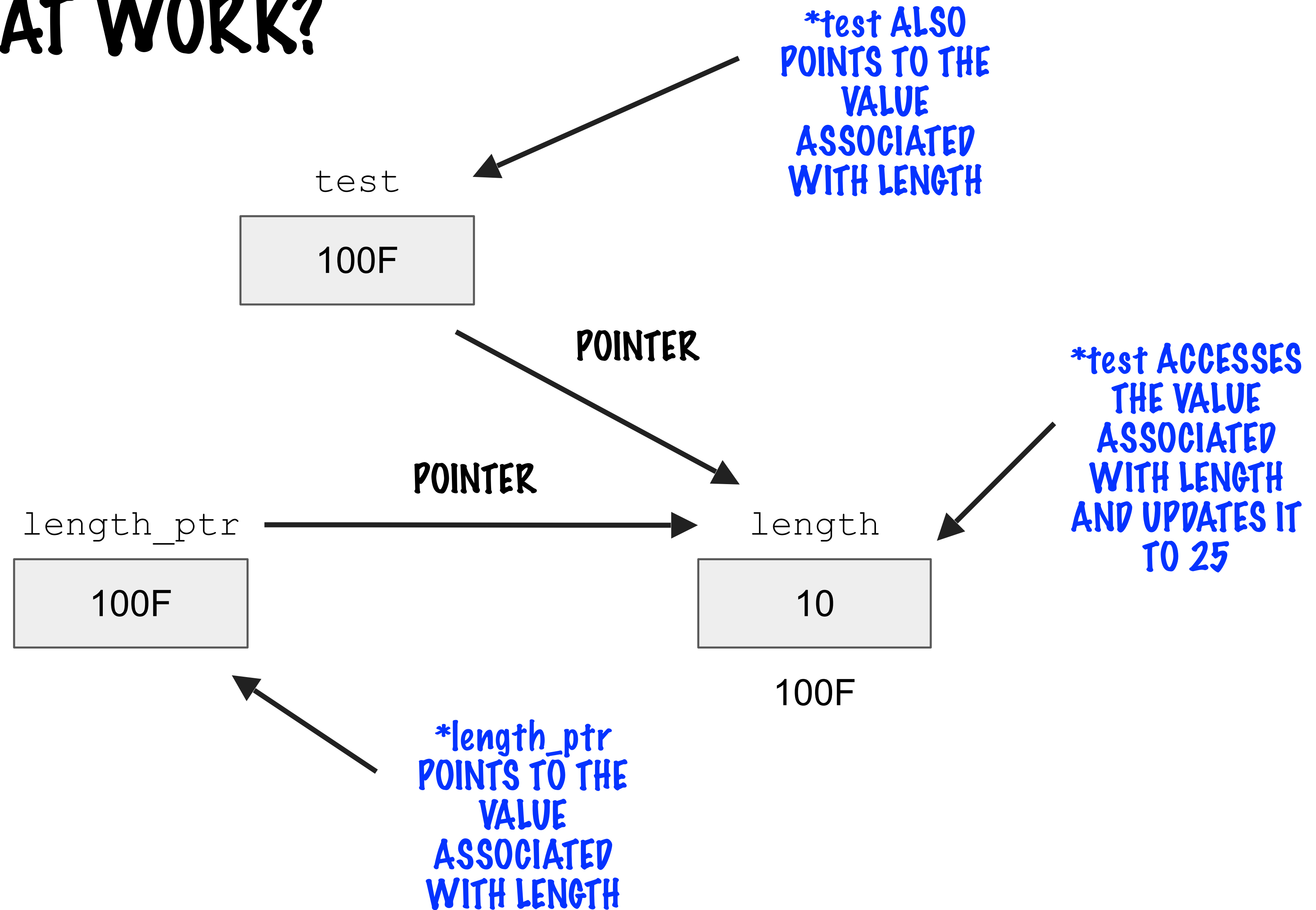
HINT: NOTE THAT WE'RE  
CHANGING THE VALUE TO WHICH  
TEST POINTS



## ANSWER

```
Printing length and bread values for the first time:
Length: 25
Breadth: 5
```

# HOW DID THAT WORK?





# PLAYING WITH POINTERS - QUESTION 4

WHAT WILL BE THE OUTPUT OF THESE LINES OF CODE?

## ANSWER

```
int length = 10;
int breadth = 5;

int *length_ptr = &length;
int *breadth_ptr = &breadth;

int *test = length_ptr;
*test = 25;
```

Printing length and bread values for the first time:  
Length: 25  
Breadth: 5  
Printing length and bread values for the second time:  
Length: 25  
Breadth: 20

```
// What will this print to screen?
printf("Printing length and bread values for the first time:\n");
printf("Length: %d\n", length);
printf("Breadth: %d\n", breadth);

test = breadth_ptr;
*test = 20;

// What will this print to screen?
printf("Printing length and bread values for the second time:\n");
printf("Length: %d\n", length);
printf("Breadth: %d\n", breadth);
```

HINT: NOTE THAT WE'RE  
CHANGING THE VALUE AT THE  
LOCATION TO WHICH TEST  
POINTS