

1. Every variable has at least three items associated with it. What are these items?

- Data type
- name
- address

↔ value



2. Write a C function named findAbs() that accepts a float number passed to it, computes its absolute value, and returns the absolute value to the calling function.

```
float Abs(float num) {  
    if (num < 0) {  
        num = num * -1;  
    }  
    return (num);  
}
```

✓

4. Write appropriate statements for:

a. An array of integers with 4 rows and 6 columns

`int arr [4] [6];`

b. An array of characters with 5 rows and 10 columns

`char name [5] [10];`

5. The output for the following program is

1: \hat{a} = (100), b = (1)

2: \hat{a} = (0), b = (1)

```
#include <stdio.h>
void f1(void);
void f2(int a);

int a;

main() {
    int b;
    a = 0; b = 1;
    f1();
    printf("1: a = %d, b = %d\n", a, b);
    a = 0; b = 1;
    f2(a);
    printf("2: a = %d, b = %d\n", a, b);
}

void f1(void) {
    int b;
    a = 100;
    b = 200;
}

void f2(int b) {
    int a;
    a = 100;
    b = 200;
}
```

global: main() f1
 int a; b=1 0200
 0200
 f2
 int a; b=1

4. Write appropriate statements for:

a. An array of integers with 4 rows and 6 columns

`int arr[4][6];`

b. An array of characters with 5 rows and 10 columns

`char name[5][10];`

5. The output for the following program is

1. $\hat{a} = (100), b = (1)$

2. $\hat{a} = (0), b = (1)$

```
#include <stdio.h>
```

```
void f1(void);
```

```
void f2(int a);
```

```
int a;
```

```
main() {
```

```
    int b;
```

```
    a = 0; b = 1;
```

```
    f1();
```

```
    printf("1: a = %d, b = %d\n", a, b);
```

```
    a = 0; b = 1;
```

```
    f2(a);
```

```
    printf("2: a = %d, b = %d\n", a, b);
```

```
}
```

```
void f1(void) {
```

```
    int b;
```

```
    a = 100;
```

```
    b = 200;
```

```
}
```

```
void f2(int b) {
```

```
    int a;
```

```
    a = 100;
```

```
    b = 200;
```

```
}
```

global main() f1 f2

main b=1

a=100

b=200

main b=1

a