

j) LDRSB R0, [R1, R2] assuming R1 = 0x50000000 and R2 = 3

R0 = 0xFFFFFFFF8A

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Homework #3.

1. Suppose that BUSINESS6 structure is defined as:

```
typedef struct BUSINESS5
```

```
{    uint32_t taxId;
```

```
    char name[23];
```

```
    char direction;
```

```
    char street[31];
```

```
    uint32_t addNo;
```

```
    char city[28];
```

```
    char state[3];
```

```
    uint32_t zip;
```

2. BUSINESS6

a) Show the relative offset of each field in the structure for the unpacked (default alignment) case:

0 uint32_t taxId;

4 char name[23];

27 char direction;

28 char street[31];

60 uint32_t addNo;

64 char city[28];

92 char state[3];

96 uint32_t zip;

b) Show the relative offset of each field in the structure for packed case.

0 uint32_t taxId;

4 char name[28];

27 char direction;

28 char street[31];

59 uint32_t addNo;

63 char city[28];

91 char state[3];

94 uint32_t zip;