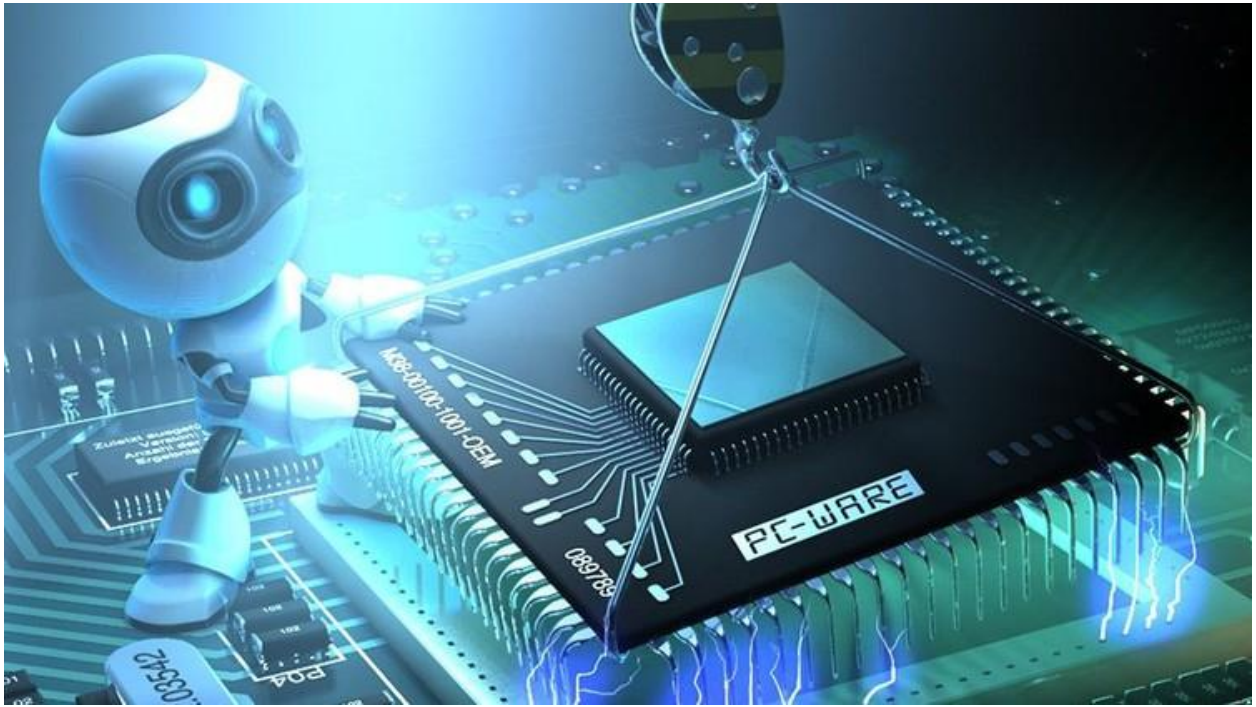
Exam 6 - Problem 1



Exam 6 - Problem 1

Given the following code in C:

```
typedef struct {
  short a;
  char b;
  char c;
  char d;
  short e;
} s1;

char *exam (s1 bird, s2 *tigers ){
char vl1;
   ...
}
```

```
typedef struct {
  char e[5];
  s1 f;
} s2;
```

Exam 6 - Problem 1

a) **Draw** how the structures `s1` and `s2` would be stored in memory, clearly indicating the offsets from the start and the size of all the fields

b) **Draw** the activation block of the `exam` function, clearly indicating the displacements relative to the EBP register necessary to access the parameters and local variables.

Exam 6 - Problem 1

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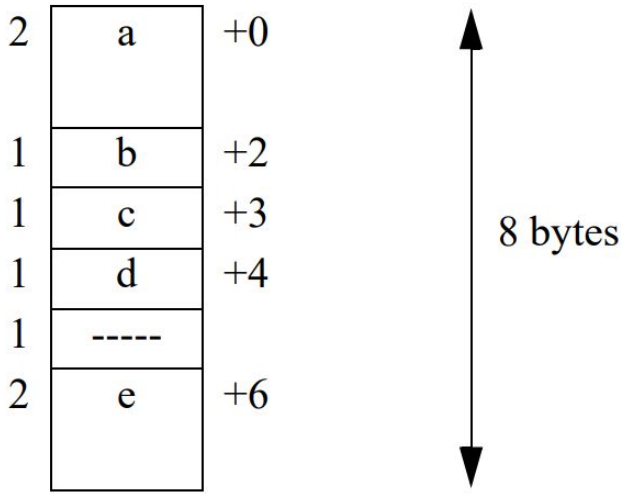


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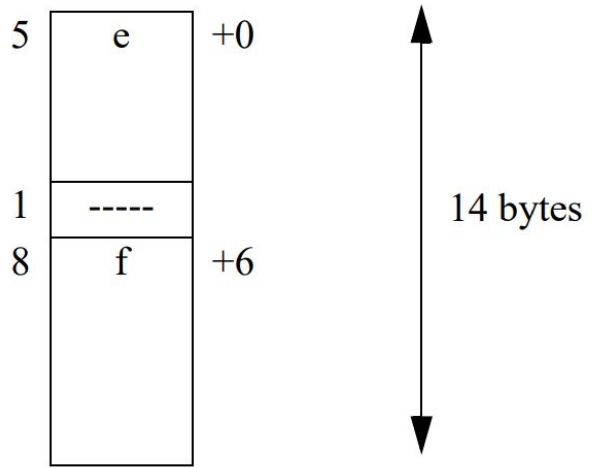

Exam 6 - Problem 1

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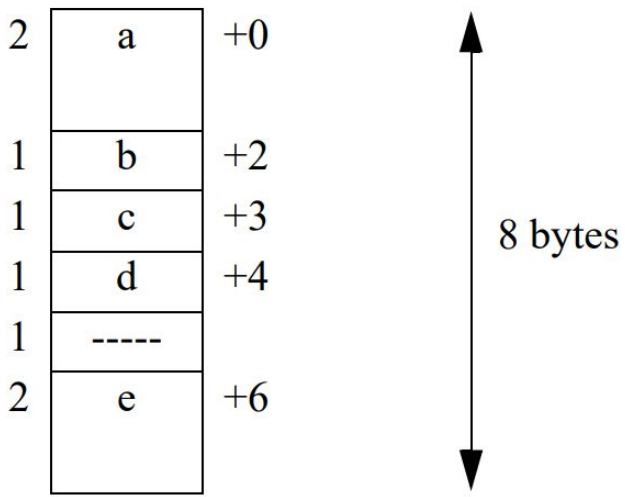

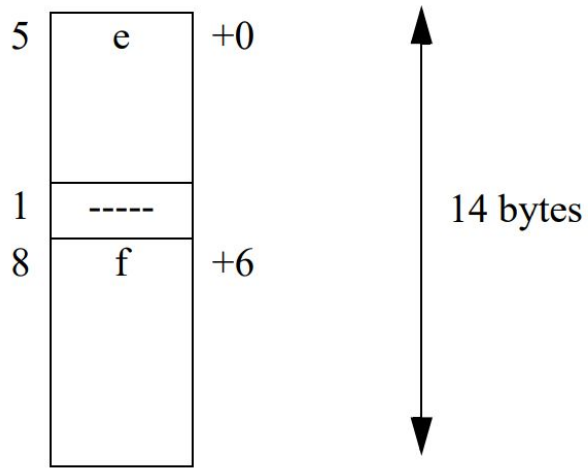

Exam 6 - Problem 1

b) **Draw** the activation block of the exam function, clearly indicating the displacements relative to the EBP register necessary to access the parameters and local variables.