

Assignment - B

enlivo

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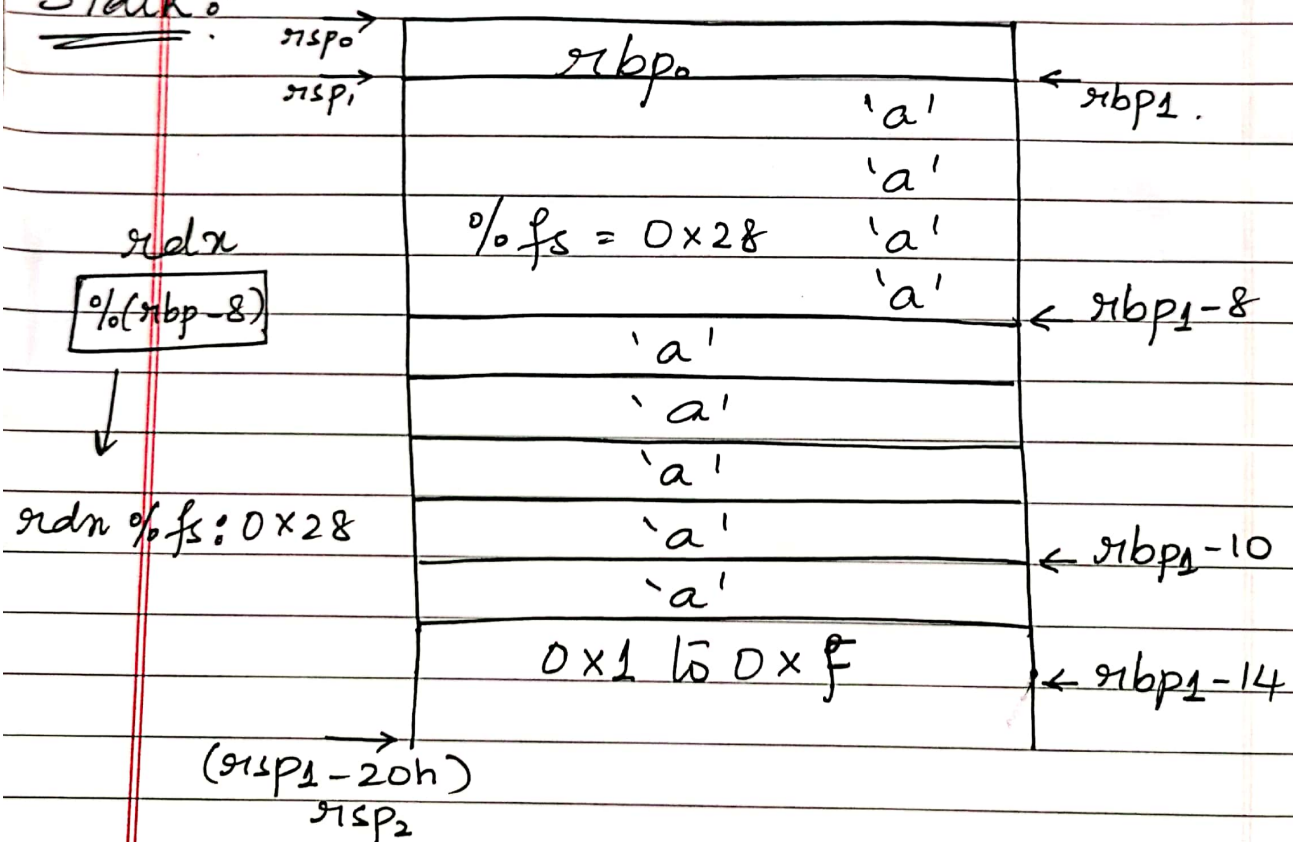
Page:

① Perform stack smashing and draw stack frame.

Programme:

```
#include <stdio.h>
int main() {
    char str[5];
    int i = 0;
    for (i = 0; i <= 15; i++)
    {
        str[i] = 'a';
    }
    return 0;
}
```

Stack:-



rdx content is changed due to overwriting of 'a'. So rdx content is no more %fs: 0x28

∴ stack_chk fail is caused.
 ∴ stack smash has occurred.

② Recursive program:

```
#include <stdio.h>
int fact (int n) {
    if (n <= 1)
        return 1;
    else
        return n * fact (n-1);
}
int main() {
    int a = fact (3);
    return 0;
}
```

