

PG-DESD - C Programming Twisters Activity

1. What will be the output of following program?

```
#include <stdio.h>
int main(void)
{
    int a = 1;
    int *p = &a;
    int *q = p;
    *p = *p + *q;
    printf("%d %d %d", *p, a, *q);
    return 0;
}
```

2. What code should be at \$\$\$ to print 9?

```
#include <stdio.h>
int sunbeam(int **q)
{
    int a = /*$$$*/;
    return a;
}
int main(void)
{
    int a = 3;
    int *p = &a;
    a=sunbeam(&p);
    printf("%d", a);
    return 0;
}
```

3. What will be the output of following program?

```
#include <stdio.h>
int main(void)
{
    int a = 1;
    printf("%d", ++a);
    main();
    return 0;
}
```

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4. What will be the output of following program?

```
#include <stdio.h>

int main(void)
{
    register char reg = 20;
    char *ptr_reg = NULL;
    ptr_reg = &reg;
    *ptr_reg = 40;
    printf("%d ", reg);
    return 0;
}
```

5. What will be the output of following program?

```
#include <stdio.h>

int var = 1;
int main(void)
{
    auto int var, var1;
    var = init();
    for(var1 = 1 ; var1 <= 3 ; var1++)
    {
        printf("%d ", first(var));
        printf("%d ", last(var));
    }
    return 0;
}

int init(void)
{
    return (var);
}

int first(int var)
{
    return var = var++;
}

int last(int var1)
{
    static int var = 5;
    return var1 = var--;
}
```