

# ODHS QUIZ

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## Q1

```
#include <stdio.h>
typedef struct employee
{
    char name[50];
    int age;
    int yoj;
    int expe;
}employee;
int calculateExperience(int year)
{
    int thisyear=2023;

    return (thisyear-year);
}

int main() {

    employee e[3];
    int max=2;

    for (int i=0;i<max;i++)
    {
        printf("enter %dth employee ",i+1);
        printf("Name: ");
        scanf("%s", e[i].name);

        printf("Age: ");
        scanf("%d", &e[i].age);

        printf("Year of Joining: ");
        scanf("%d", &e[i].yoj);

        // Calculate experience
        e[i].expe = calculateExperience(e[i].yoj);
        printf("\n");
    }

    printf("Employee Details:\n");
    for (int i = 0; i < max; i++) {
        printf("Employee %d:\n", i + 1);
        printf("Name: %s\n", e[i].name);
        printf("Age: %d\n", e[i].age);
```

```
        printf("Year of Joining: %d\n", e[i].yoj);  
        printf("Experience: %d years\n", e[i].expe);  
        printf("\n");  
    }  
  
    return 0;  
}
```

```
/tmp/i6w0jLKeGo.o  
enter 1th employee Name: hello  
Age: 44  
Year of Joining: 2012  
enter 2th employee Name: world  
Age: 56  
Year of Joining: 2010  
Employee Details:  
Employee 1:  
Name: hello  
Age: 44  
Year of Joining: 2012  
Experience: 11 years  
  
Employee 2:  
Name: world  
Age: 56  
Year of Joining: 2010  
Experience: 13 years
```

Q2

```
int intToBinary(int n, char binary[]) {
    int isEven = 0;
    int index = 0;

    if (n % 2 == 0) {
        isEven = 1;
    }

    while (n > 0) {
        binary[index++] = (n % 2) + '0';
        n = n / 2;
    }
    binary[index] = '\0';

    return isEven;
}

int main() {
    int n;
    printf("Enter an integer: ");
    scanf("%d", &n);

    char binary[50];

    int isEven = intToBinary(n, binary);

    printf("Binary of %d is : %s\n", n, binary);

    if (isEven) {
        printf("%d is even\n", n);
    } else {
        printf("%d is odd \n", n);
    }

    return 0;
}
```

```
/tmp/TmJbjKaZT2.o
Enter an integer: 3
Binary of 3 is : 11
3 is odd
|
```

```
/tmp/TmJbjKaZT2.o
```

```
Enter an integer: 22
```

```
Binary of 22 is : 01101
```

```
22 is even
```

Q3

```
1  #include <stdio.h>
2
3  void swap(int *a, int *b) {
4      int temp = *a;
5      *a = *b;
6      *b = temp;
7  }
8
9  int main() {
10     int a, b;
11
12     int *p1 = &a;
13     int *p2 = &b;
14
15     printf("Enter the 1st integer: ");
16     scanf("%d", p1);
17
18     printf("Enter the 2nd integer: ");
19     scanf("%d", p2);
20
21     printf("Before : a = %d, b = %d\n", a, b);
22
23
24     swap(p1, p2);
25
26     printf("After : a = %d, b = %d\n", a, b);
27
28     return 0;
29 }
```

*/tmp/k00F9BES3R.o*

Enter the 1st integer: 5

Enter the 2nd integer: 10

Before : a = 5, b = 10

After : a = 10, b = 5