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**(To be filled by Candidate)**

<b>Course:</b>	<b>Programming In C (PIC)</b>		
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<b>Year/ Sem:</b>	<b>FY B-Tech / I</b>	<b>Branch / Batch:</b>	<b>ETRX / D2</b>

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**PROGRAM 1 CODE: (Copy your program below)**

```
#include <stdio.h>
void main()
{
    int decimal;
    int quotient;
    int remainder;
    int i;
    int j;
    char hexadecimal[100];

    printf("Enter a decimal number to be converted into hexadecimal number: ");
    scanf("%d", &decimal);

    quotient = decimal;
    while (quotient != 0)
    {
        remainder = quotient % 16;
        if (remainder < 10)
        {
            hexadecimal[j++] = remainder + 48;
        }
        else
        {
            hexadecimal[j++] = remainder + 55;
        }
        quotient = quotient / 16;
    }
    printf("\n-----\n");
    printf("The hexadecimal code generated by the code is: \n");
    for (i = j; i >= 0; i--)
    {
        printf("%c", hexadecimal[i]);
    }
}
```

**PROGRAM 1 OUTPUT/ ERROR: (Copy your output or error below)**

```
#include <stdio.h>
void main()
{
    int decimal;
    int quotient;
    int remainder;
    int i;
    int j;
    char hexadecimal[100];

    printf("Enter a decimal number to be converted into hexadecimal number: ");
    scanf("%d", &decimal);

    quotient = decimal;
    while (quotient != 0)
    {
        remainder = quotient % 16;
        if (remainder < 10)
        {
            hexadecimal[j++] = remainder + 48;
        }
        else
        {
            hexadecimal[j++] = remainder + 55;
        }
        quotient = quotient / 16;
    }
    printf("\n-----\n");
    printf("The hexadecimal code generated by the code is: ");
    for (i = j; i >= 0; i--)
    {
        printf("%c", hexadecimal[i]);
    }
}
```

Enter a decimal number to be converted into hexadecimal number: 21

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The hexadecimal code generated by the code is:

15

Process returned 53 (0x35) execution time : 3.521 s

Press any key to continue.

**PROGRAM 2 CODE: (Copy your program below)**

```
#include <stdio.h>
void main()
{
    int arr[1000];
    int input;
    int i= 0;
    //input a sequence from the user:
    printf("Enter a sequence of numbers. To stop typing, enter -1: \n");
    while(input != -1)
    {
        scanf("%d", &input);
        arr[i] = input;
        i++;
    }
    int j, k;
    //input value for k:
    printf("Enter the value of k to print the kth occurrence of the even number: ");
    scanf("%d", &k);

    for(j = 0; j < 1000; j ++)
    {
        if(arr[j] % 2 == 0)
        {
            k--;
        }
        if(k == 0)
        {
            printf("%d", arr[j]);
            break;
        }
    }
}
```

**PROGRAM 2 OUTPUT/ ERROR: (Copy your output or error below)**

The screenshot displays the Code::Blocks IDE with a C++ program and its execution output. The program is designed to read a sequence of numbers from the user, store them in an array, and then print the k-th occurrence of an even number. The output window shows the program's execution, including prompts for input and the final result.

```
#include <stdio.h>
void main()
{
    int arr[1000];
    int input;
    int i = 0;
    //input a sequence from the user:
    printf("Enter a sequence of numbers. To stop typing, enter -1:");
    while(input != -1)
    {
        scanf("%d", &input);
        arr[i] = input;
        i++;
    }
    int j, k;
    //input value for k:
    printf("Enter the value of k to print the kth occurrence of the even number:");
    scanf("%d", &k);
    for(j = 0; j < 1000; j++)
    {
        if(arr[j] % 2 == 0)
        {
            k--;
        }
        if(k == 0)
        {
            printf("%d", arr[j]);
            break;
        }
    }
}
```

Output:

```
Enter a sequence of numbers. To stop typing, enter -1:
12
23
34
45
56
67
78
89
-1
Enter the value of k to print the kth occurrence of the even number: 3
56
Process returned 2 (0x2)   execution time : 18.002 s
Press any key to continue.
```