C-Lab-3

1 : Write a 'C' program to check and print that given number is even or odd without using ternary operator and control statments.

Sample input : int a = 10

Sample Output : EVEN

=====================

Sample input : int a = 125

Sample Output : ODD

ANS:

```c
#include <stdio.h>
int main() {
    int a;
    printf("Enter the num:");
    scanf("%d", &a);
    a%2==0 && printf("Even");
    a%2!=0 && printf("Odd");
    return 0;
}
```

2 : Write a 'C' program to check and print the Maximum number among two numbers without using ternary operator and control statments.

Sample input : int a = 10 , b = 20

Sample Output : MAX = 20

ANS:

```c
// Online C compiler to run C program online
#include <stdio.h>
int main() {
    int a,b,max;
    printf("Enter first number:");
    scanf("%d",&a);
    printf("Enter second number:");
    scanf("%d",&b);
    max=(a+b+(a-b));
    printf("MAX:%d",max);
    return 0;
}
```

3 : Write a 'C' program to check and print the Maximum number among three numbers without using ternary operator and control statements.

Sample input : int a = 10 , b = 200, c = 134;

Sample Output : MAX = 200

ANS:

```c
#include <stdio.h>
int main() {
    int a,b,c,max;
    printf("Enter first number:");
    scanf("%d",&a);
    printf("Enter second number:");
    scanf("%d",&b);
    printf("Enter third number:");
    scanf("%d",&c);
     max = a;
    (b > max) && (max = b);
    (c > max) && (max = c);
```

```c
    printf("MAX: %d\n", max);

    return 0;

}
```

4 : Write a 'C' program to take the marks of a student in 5 subjects as input and determine how many subjects have marks greater than or equal to 35 and how many have marks less than 35.

------- The program should not use any control statements (if, else, switch, etc.) or the ternary operator.

Sample input : int sub1 = 38, sub2 = 34, sub3 = 35, sub4 = 78, sub5 = 20

Sample Output : Pass in 3 subject and fail in 2 subject.

ANS:

```c
#include <stdio.h>
int main() {
    int sub1, sub2, sub3, sub4, sub5;
    int passCount = 0, failCount = 0;
    int passingScore = 35;
    printf("Enter first score: ");
```

```c
    scanf("%d", &sub1);
    printf("Enter second score: ");
    scanf("%d", &sub2);
    printf("Enter third score: ");
    scanf("%d", &sub3);
    printf("Enter fourth score: ");
    scanf("%d", &sub4);
    printf("Enter fifth score: ");
    scanf("%d", &sub5);
    (sub1 >= passingScore && (passCount++)) ||
(failCount++);
    (sub2 >= passingScore && (passCount++)) ||
(failCount++);
    (sub3 >= passingScore && (passCount++)) ||
(failCount++);
    (sub4 >= passingScore && (passCount++)) ||
(failCount++);
    (sub5 >= passingScore && (passCount++)) ||
(failCount++);
    printf("Number of subjects passed: %d\n",
passCount);
```

```c
        printf("Number of subjects failed: %d\n", failCount);

        return 0;

}
```

5 : Write a 'C' program to take the number of days and convert into (days:months:years)

Sample input : int days = 500

Sample Output : 1 year 4 month and 15 days.

ANS:

```c
#include <stdio.h>
int main(){
    int n,y,m,w,d;
    printf("Enter no of days: ");
    scanf("%d", &n);
    y=n/365;
    m=n%365/30;
    w=n%365%30/7;
```

```c
    d=n%365%30%7;
printf("total days:%d year %dmonth %d week %d
days",y,m,w,d);
    return 0;
}
```

6 : Write a 'C' program to take the number of seconds
and convert into (H:M:S)

Sample input : int seconds = 3665

Sample Output : 1 hour 1 minute and 5 second

ANS:

```c
#include <stdio.h>
int main()
    int n,h,m,s;
    printf("Enter seconds: ");
    scanf("%d", &n);
h=n/3600;
m=n%3600/60;
s=n%60;
```

```c
    printf("duration:%d hour %d minute %d sec",h,m,s);
    return 0;
}
```