

MID-SEM CP LAB ASSIGNMENT

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```
main.c
1  #include <stdio.h>
2  void main()
3  {
4      char choice,ch;
5      int num1,num2;
6      int sum1,sum2;
7      int n1,n2;
8      while(1)
9      {
10         printf("Enter the choice 'y' or 'Y' to continue\n");
11         scanf("%c",&choice);
12         if(choice=='y' || choice=='Y')
13         {
14             printf("*****\n");
15             printf("TASK: To check whether the sum of digits of two numbers is same\n\n");
16             printf("*****\n");
17             printf("Enter the first number\n");
18             scanf("%d",&num1);
19             printf("Enter the second number\n");
20             scanf("%d",&num2);
21             n1=num1;
22             n2=num2;
23             sum1=0;
24             sum2=0;
25             while(n1!=0)
26             {
27                 sum1+=(n1%10);
28                 n1/=10;
29             }
30             while(n2!=0)
31             {
32                 sum2+=(n2%10);
33                 n2/=10;
34             }
35             printf("Sum of digits of the first number= %d",sum1);
36             printf("\nSum of digits of the second number= %d",sum2);
37             printf("\n\n");
38             if(sum1==sum2)
39             {
40                 printf("THE SUM OF DIGITS OF %d AND %d IS SAME\n\n",num1,num2);
41             }
42             else
43             {
44                 printf("THE SUM OF DIGITS OF %d AND %d IS NOT SAME\n\n",num1,num2);
45             }
46             printf("*****\n");
47             scanf("%c",&ch);
48         }
49         else
50         {
51             break;
52         }
53     }
54     printf("\nTHANK YOU");
55 }
56
```

Figure 1. Screen Shot of the Code on the online compiler

```
Enter the choice 'y' or 'Y' to continue
y
*****
TASK: To check whether the sum of digits of two numbers is same
*****
Enter the first number
3456
Enter the second number
1234
Sum of digits of the first number= 18
Sum of digits of the second number= 10

THE SUM OF DIGITS OF 3456 AND 1234 IS NOT SAME

*****
Enter the choice 'y' or 'Y' to continue

```

Figure 2. Screenshot of the output on given sample input

```
Enter the choice 'y' or 'Y' to continue
n

THANK YOU

...Program finished with exit code 10
Press ENTER to exit console.

```

Figure 3. Screenshot when the input parameter is unfavorable

CODE SEGMENT :

```
#include <stdio.h>

void main ( )
{
    char choice self, ch;
    int num1, num2;
    int sum1, sum2;
    int n1, n2;
    while (1)
    {
        printf("Enter the choice 'y' or 'Y' to continue\n");
        scanf ("%c", &choice);
        if (choice == 'y' || choice == 'Y')
        {
            printf("*****\n");
            printf("TASK: To check whether sum of digits of two  
numbers is same\n\n");
            printf("*****\n");
            printf("Enter the first number\n");
            scanf ("%d", &num1);
            printf("Enter the second number\n");
            scanf ("%d", &num2);
            n1 = num1;
            n2 = num2;
            sum1 = 0;
            sum2 = 0;
```

```
while (n1 != 0)
```

```
{
```

```
    sum1 += (n1 % 10);
```

```
    n1 /= 10;
```

```
}
```

```
while (n2 != 0)
```

```
{
```

```
    sum2 += (n2 % 10);
```

```
    n2 /= 10;
```

```
}
```

```
printf("The Sum of digits of first number = %.d", sum1);
```

```
printf("\n Sum of digits of the second number = %.d",  
sum2);
```

```
printf("\n\n");
```

```
if (sum1 == sum2)
```

```
{
```

```
    printf("THE SUM OF DIGITS OF %.d AND
```

```
%.d IS SAME\n\n", num1, num2);
```

```
}
```

```
else
```

```
{
```

```
    printf("THE SUM OF DIGITS OF %.d AND
```

```
%.d IS NOT SAME\n\n", num1, num2);
```

```
}
```

```
printf("*****\n*****\n");
```

```
scanf("%c", &ch);
```

```
}
```

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```
    else  
    {  
        break ;  
    }  
}  
printf ("\n THANK YOU");  
}
```