

# Exercise of array

## Sum of first and last digits number

```
1  #include<stdio.h>
2  int main() {
3      int n;
4      int i, first;
5      printf("\nInput the number : "); scanf("%d", &n);
6      int last=n%10;
7      i=n;
8      while(i>0)
9      {
10         first=i%10;
11         i=i/10;
12     }
13     printf("sum of first and last digit of a number is : %d", first+last);
14
15 }
```

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## Sum of digits of the number

```
1  #include<stdio.h>
2  int main() {
3      int n, sum=0, m;
4      printf("\nInput the number : "); scanf("%d", &n);
5      while(n>0)
6      {
7          m=n%10;
8          sum=sum+m;
9          n=n/10;
10     }
11     printf("sum of digits of a number = %d", sum);
12
13 }
```

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## Product of digits of the number

```
1  #include<stdio.h>
2  int main() {
3      int n, sum=0, m;
4      printf("\nInput the number : "); scanf("%d", &n);
5      while(n>0)
6      {
7          m=n%10;
8          sum=sum+m;
9          n=n/10;
10     }
11     printf("sum of digits of a number = %d", sum);
12
13 }
```

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## Reverse number

```
1  #include <stdio.h>
2  int main() {
3      int n, rev = 0, remainder;
4      printf("Input the number: ");
5      scanf("%d", &n);
6      while (n != 0) {
7          remainder = n % 10;
8          rev = rev * 10 + remainder;
9          n /= 10;
10     }
11     printf("Reversed number = %d", rev);
12 }
```

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## Sum of array

```
1  #include<stdio.h>
2  int main() {
3      float num[5];
4      float sum=0;
5      float average;
6      for(int i=0;i<5;i++)
7      {
8          printf("\nInput the number : ");
9          scanf("%f",&num[i]);
10         sum=sum+num[i];
11     }
12     printf("\n=====Output=====\\n");
13     average = sum/5;
14     printf("\n==> The sum of array is : %.1f",sum);
15     printf("\n==> The average number of array is : %.1f",average);
16
17
18 }
```

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## High score than average

```
1  #include<stdio.h>
2  int main(){
3      char name[5][20];
4      float score[5];
5      char gmail[5][50];
6      int phone[5];
7      float average,sum=0;
8      int k;
9      for(int i=0;i<5;i++)
10     {
11         printf("\nInput the name%d : ",i+1);scanf("%s",&name[i]);
12         printf("\nInput the score%d : ",i+1);scanf("%f",&score[i]);
13         printf("\nInput the gmail%d : ",i+1);scanf("%s",&gmail[i]);
14         printf("\nInput the phone%d : ",i+1);scanf("%d",&phone[i]);
15         sum=sum+score[i];
16     }
17     average=sum/5;
18     printf("\nThe average number is : %.1f",average);
19     printf("\nThe students who score >= average have :");
20     printf("\n===== Output student =====\\n");
21     for(int i=0;i<5;i++)
22     {
23         if(average<=score[i])
24         {
25             printf("\n%s\t%.2f\t%s\t%d",name[i],score[i],gmail[i],phone[i]);
26             k++;
27         }
28     }
29 }
```

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# Code

```
1  #include<stdio.h>
2  int main() {
3      char name[6][20];
4      char gender[6], male, female;
5      float salary[5];
6      int phone[5];
7      float average, sum=0, high, low;
8      int k;
9      for(int i=0; i<6; i++)
10     {
11         printf("\nInput the name%d : ", i+1); scanf("%s", &name[i]);
12         fflush(stdin);
13         printf("\nInput the gender%d : ", i+1); scanf("%c", &gender[i]);
14         fflush(stdin);
15         printf("\nInput the salary%d : ", i+1); scanf("%f", &salary[i]);
16         printf("\nInput the phone%d : ", i+1); scanf("%d", &phone[i]);
17         sum=sum+salary[i];
18     }
19     male=gender[0];
20     low=salary[0];
21     high=salary[0];
22     printf("\n===== Output employees =====\n");
23     average=sum/6;
24     printf("\nThe employee who got the highest salary : ");
25     for(int i=0; i<6; i++)
26     {
27         if(salary[i]>high)
28         {
29             high=salary[i];
30         }
31     }
32     for(int i=0; i<6; i++)
33     {
34         if(salary[i]==high)
35         {
36             printf("\n%s\t%c\t%.f\t%d\n", name[i], gender[i], salary[i], phone[i]);
37         }
38     }
39     printf("\n===== \n");
40     printf("\nThe employee who got the lowest salary : ");
41     for(int i=0; i<6; i++)
42     {
43         if(salary[i]<low)
44         {
45             high=salary[i];
46         }
47     }
48     for(int i=0; i<6; i++)
49     {
50         if(salary[i]==low)
51         {
52             printf("\n%s\t%c\t%.f\t%d\n", name[i], gender[i], salary[i], phone[i]);
53         }
54     }
55     printf("\n===== \n");
```

```
56 printf("\nThe employees whose gender is male : ");
57 for(int i=0;i<6;i++)
58 {
59     if(gender[i]=='m')
60     {
61         printf("\n%s\t%c\t%.f\t%d\n",name[i],gender[i],salary[i],phone[i]);
62     }
63 }
64 printf("\n=====\\n");
65 printf("\nThe employees whose gender is female : ");
66 for(int i=0;i<6;i++)
67 {
68     if(gender[i]=='f')
69     {
70         printf("\n%s\t%c\t%.f\t%d\n",name[i],gender[i],salary[i],phone[i]);
71     }
72 }
73 printf("\nThe average number is : %.1f",average);
74 printf("\nThe students who score >= average have :");
75 for(int i=0;i<6;i++)
76 {
77     if(average<=salary[i])
78     {
79         printf("\n%s\t%.2f\t%s\t%d",name[i],salary[i],gender[i],phone[i]);
80     }
81 }
82 }
```

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