

# Final Test

1

```
1  #include<stdio.h>
2
3  int main() {
4
5      int width, length, area;
6
7      printf("Enter a length of rectangle: ");
8      scanf("%d", &length);
9
10     printf("Enter a width of rectangle: ");
11     scanf("%d", &width);
12
13     printf("\nans:\n");
14     area = length * width;
15     printf("area of rectangle is: %d", area);
16
17     return 0;
18
19 }
```

```
Enter a length of rectangle: 10
Enter a width of rectangle: 15

ans:
area of rectangle is: 150
```

```
1  #include<stdio.h>
2
3  int main() {
4
5      int first, second, temp;
6
7      printf("Enter a first number: ");
8      scanf("%d", &first);
9
10     printf("Enter a second number: ");
11     scanf("%d", &second);
12
13     temp = first;
14     first = second;
15     second = temp;
16
17     printf("\nans:\n");
18     printf("Your first number is: %d\n", first);
19     printf("Your second number is: %d", second);
20
21     return 0;
22
23 }
```

```
Enter a first number: 40
Enter a second number: 10

ans:
Your first number is: 10
Your second number is: 40
```

```
1  #include<stdio.h>
2
3  int main() {
4
5      int num;
6
7      printf("Enter a number: ");
8      scanf("%d", &num);
9
10     printf("\nans:\n");
11     if (num % 2 == 0) {
12         printf("%d is even number", num);
13     } else {
14         printf("%d is odd number", num);
15     }
16
17     return 0;
18
19 }
```

Enter a number: 5

ans:  
5 is odd number

Enter a number: 8

ans:  
8 is even number

```
1  #include<stdio.h>
2
3  int main() {
4
5      int num;
6
7      printf("Enter a number: ");
8      scanf("%d", &num);
9
10     printf("\nans:\n");
11     if (num % 5 == 0) {
12         printf("%d is divisible by 5", num);
13     } else {
14         printf("%d is not divisible by 5", num);
15     }
16
17     return 0;
18
19 }
```

Enter a number: 50

ans:

50 is divisible by 5

Enter a number: 42

ans:

42 is not divisible by 5

```
1  #include<stdio.h>
2
3  int main() {
4
5      int ary[3], max, i;
6
7      for (i=0; i<3; i++) {
8          printf("Enter a %d number in array : " , i+1);
9          scanf("%d", &ary[i]);
10     }
11
12     for (i=0; i<3; i++) {
13         if (ary[i] > ary[i+1]) {
14             max = ary[i];
15         }
16     }
17
18     printf("\nans:\n");
19     printf("%d", max);
20
21     return 0;
22
23 }
```

```

1  #include<stdio.h>
2
3  int main() {
4
5      int n, i, x, rem, num;
6
7      printf("Enter a number: ");
8      scanf("%d", &n);
9
10     x = n;
11
12     for (i=1; i<=n; i++) {
13         rem = n % 10;
14         num = num + (rem * rem * rem);
15         n = n / 10;
16     }
17
18     printf("\nans:\n");
19     if (x == num) {
20         printf("%d is armstrong number", x);
21     } else {
22         printf("%d is not armstrong number", x);
23     }
24
25     return 0;
26
27 }

```

Enter a number: 153

ans:  
153 is armstrong number

Enter a number: 7

ans:  
7 is not armstrong number

```
1  #include<stdio.h>
2
3  int main() {
4
5      int n, i, num;
6
7      printf("Enter a number: ");
8      scanf("%d", &n);
9
10     for (i=n; i>=1; i--) {
11         num = num * i;
12     }
13
14     printf("\nans:\n");
15     printf("%d", num);
16
17     return 0;
18
19 }
```

Enter a number: 5

ans:  
120

```

1  #include<stdio.h>
2
3  int main() {
4
5      int n, i, num, x;
6
7      printf("Enter a number: ");
8      scanf("%d", &n);
9
10     if (n>1) {
11         if (n == 2) {
12             printf("%d is prime number", n);
13         } else {
14             for (i=2; i<n-1; i++) {
15                 if (i % n == 0){
16                     return x = 1;
17                     break;
18                 } else {
19                     return x = 0;
20                 }
21             }
22         }
23     } else {
24         printf("%d is not desirable number");
25     }
26
27     printf("\nans:\n");
28     if (x == 0) {
29         printf("%d is prime number", n);
30     } else {
31         printf("%d is not a prime number", n);
32     }
33
34     return 0;
35
36 }

```



```
1  #include<stdio.h>
2
3  int main() {
4
5      char i;
6
7      for (i='A'; i<='Z'; i++) {
8          printf("%c\n", i);
9      }
10
11     return 0;
12
13 }
```

```
A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
P
Q
R
S
T
U
V
W
X
Y
Z
```

```
1  #include<stdio.h>
2
3  int main() {
4
5      char str[100], ans;
6
7      printf("Enter a string: ");
8      gets(str);
9
10     strrev(str);
11     printf("\nreverse string is: ");
12     puts(str);
13
14     return 0;
15
16 }
```

```
Enter a string: hello
reverse string is: olleh
```

```
1  #include<stdio.h>
2
3  int main() {
4
5      char str[100], i, count = 0, n;
6      int ans;
7
8      printf("Enter a string: ");
9      gets(str);
10
11     for (i=0; i<n; i++) {
12         n = n / 10;
13         count++;
14     }
15
16     printf("%d", count);
17
18     // ans = strlen(str);
19     // printf("%d", ans);
20
21     return 0;
22
23 }
```

```
1  #include<stdio.h>
2
3  int main() {
4
5      int ary[10], i, lower;
6
7      for (i=0; i<10; i++) {
8          printf("Enter a %d number in array :" , i+1);
9          scanf("%d", &ary[i]);
10     }
11
12     for (i=0; i<10; i++) {
13         if (ary[i+1] > ary[i]) {
14             lower = ary[i];
15         }
16     }
17
18     printf("\nans:\n");
19     printf("%d", lower);
20
21     return 0;
22
23 }
```

```

1  #include<stdio.h>
2  int main() {
3      float amount, discount, total_amount;
4      char product;
5      printf("Enter a amount: ");
6      scanf("%f", &amount);
7      printf("Enter a Mill Cloth for M or Heandloom items for H: ");
8      scanf(" %c", &product);
9      if (amount > 0 && amount <= 100) {
10         if (product == 'M' || product == 'm') {
11             discount = amount * 0 / 100;
12         } else if (product == 'H' || product == 'h') {
13             discount = amount * 5 / 100;
14         } else {
15             printf("invalid product");
16         }
17     } else if (amount >= 101 && amount <= 200) {
18         if (product == 'M' || product == 'm') {
19             discount = amount * 5 / 100;
20         } else if (product == 'H' || product == 'h') {
21             discount = amount * 7.5 / 100;
22         } else {
23             printf("invalid product");
24         }
25     } else if (amount >= 201 && amount <= 300) {
26         if (product == 'M' || product == 'm') {
27             discount = amount * 7.5 / 100;
28         } else if (product == 'H' || product == 'h') {
29             discount = amount * 10 / 100;
30         } else {
31             printf("invalid product");
32         }
33     } else if (amount > 300) {
34         if (product == 'M' || product == 'm') {
35             discount = amount * 10 / 100;
36         } else if (product == 'H' || product == 'h') {
37             discount = amount * 15 / 100;
38         } else {
39             printf("invalid product");
40         }
41     }
42     total_amount = amount - discount;
43     printf("\nans:\n");
44     printf("Your Amount Is: %f\n", amount);
45     printf("Your Discount Is: %f\n", discount);
46     printf("Your Total Amount Is: %f", total_amount);
47     return 0;
48 }

```

```

Enter a amount: 50
Enter a Mill Cloth for M or Heandloom items for H: m

ans:
Your Amount Is: 50.000000
Your Discount Is: 0.000000
Your Total Amount Is: 50.000000

```

```

Enter a amount: 250
Enter a Mill Cloth for M or Heandloom items for H: h

ans:
Your Amount Is: 250.000000
Your Discount Is: 25.000000
Your Total Amount Is: 225.000000

```

```

1  #include<stdio.h>
2
3  int main() {
4
5      int i , j, k;
6
7      for (i=1; i<=5; i++) {
8          for (k=5; k>i; k--) {
9              printf(" ");
10             }
11             for (j=1; j<=i; j++) {
12                 printf("* ");
13             }
14             for (j=1+1; j<=i; j++) {
15                 printf("* ");
16             }
17             printf("\n");
18         }
19
20     return 0;
21
22 }
```

```

      *
    * * *
  * * * * *
* * * * * * *
* * * * * * * *
```

```

1  #include<stdio.h>
2
3  int main() {
4
5      int i , j, k;
6
7      for (i=1; i<=5; i++) {
8          for (j=1; j<=i; j++) {
9              printf("%d ", j);
10         }
11         for (k=5; k>i; k--) {
12             printf(" ");
13         }
14         for (k=5; k>i; k--) {
15             printf(" ");
16         }
17         for (j=i; j>=1; j--) {
18             printf("%d ", j);
19         }
20         printf("\n");
21     }
22
23     return 0;
24
25 }
```

```

1          1
1 2          2 1
1 2 3          3 2 1
1 2 3 4          4 3 2 1
1 2 3 4 5 5 4 3 2 1
```

```

1  #include<stdio.h>
2
3  int main() {
4
5      int i , j;
6
7      for (i=1; i<=5; i++) {
8          for (j=1; j<=i; j++) {
9              printf("%d ", j);
10             }
11             printf("\n");
12         }
13         for (i=5; i>=1; i--) {
14             for (j=1; j<i; j++) {
15                 printf("%d ", j);
16             }
17             printf("\n");
18         }
19
20         return 0;
21     }
22 }

```

```

1
1 2
1 2 3
1 2 3 4
1 2 3 4 5
1 2 3 4
1 2 3
1 2
1

```



```
1  #include<stdio.h>
2
3  int main() {
4
5      int i , j, k = 1;
6
7      for (i=1; i<=5; i++) {
8          for (j=1; j<=i; j++) {
9              printf("%d ", k++);
10             }
11             printf("\n");
12         }
13
14         return 0;
15     }
16 }
```

```
1
2 3
4 5 6
7 8 9 10
11 12 13 14 15
```