

Hello.c

```
1 #include <stdio.h>
2
3
4 int main() {
5     int i = 5;
6     do {
7         printf("%d\n", i);
8         i--;
9     } while(i>=1);
10
11
12     return 0;
13 }
```

Hello.c

```
1 #include <stdio.h>
2
3 int main() {
4     int n;
5     do {
6         printf("enter number : ");
7         scanf("%d", &n);
8         printf("%d\n", n);
9
10        if(n % 7 == 0) {
11            break;
12        }
13    } while(1);
14    printf("thank you");
15
16    return 0;
17}
18 }
```

Hello.c

```
1 #include <stdio.h>
2
3 int main() {
4     int n;
5     printf("enter number : ");
6     scanf("%d", &n);
7
8     int sum = 0;
9     for(int i=1; i<=n; i++) {
10         sum = sum + i; // sum += i;
11     }
12     printf("sum is %d\n", sum);
13     return 0;
14 }
```

Hello.c

```
1 #include <stdio.h>
2
3 int main() {
4     int n;
5     printf("enter number : ");
6     scanf("%d", &n);
7
8     int sum = 0;
9     for(int i=1, j=n; i<=n && j>=1; i++, j--) {
10         sum = sum + i; // sum += i;
11         printf("%d\n", j);
12     }
13
14     printf("sum is %d\n", sum);
15
16     return 0;
17 }
```

Hello.c

```
1 #include <stdio.h>
2
3 int main() {
4     int n;
5     printf("enter number : ");
6     scanf("%d", &n);
7
8     for(int i=1; i<=10; i++) {
9         printf("%d \n", n*i);
10    }
11
12    return 0;
13 }
```

Hello.c

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

Hello.c

```
1 #include <stdio.h>
2
3 int main() {
4     int n;
5     do {
6         printf("enter number : ");
7         scanf("%d", &n);
8         printf("%d\n", n);
9
10        if(n % 2 != 0) {
11            break;
12        }
13    } while(1);
14    printf("thank you");
15
16    return 0;
17}
18 }
```

Hello.c

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

Hello.c

```
1 #include <stdio.h>
2
3 int main() {
4     int n;
5     printf("enter number : ");
6     scanf("%d", &n);
7
8     int fact = 1;
9     for(int i=1; i<=n; i++) {
10         fact = fact * i;
11     }
12     printf("final factorial is : %d", fact);
13     return 0;
14 }
```

Hello.c

```
1 #include <stdio.h>
2
3 int main() {
4     int sum = 0;
5     for(int i=5; i<=50; i++) {
6         sum += i;
7     }
8
9     printf("sum is %d", sum);
10
11    return 0;
12 }
```

Hello.c

```
1 #include <stdio.h>
2 void namaste();
3 void bonjour();
4
5 int main() {
6     printf("enter f for french & i for indian : ");
7     char ch;
8     scanf("%c", &ch);
9
10    if(ch == 'i') {
11        namaste();
12    } else {
13        bonjour();
14    }
15    return 0;
16}
17
18 void namaste() {
19     printf("Namaste\n");
20 }
21
22 void bonjour() {
23     printf("Bonjour\n");
24 }
```

Hello.c

```
1 #include <stdio.h>
2 void namaste();
3 void bonjour();
4
5 int main() {
6     printf("enter f for french & i for indian : ");
7     char ch;
8     scanf("%c", &ch);
9
10    namaste();
11    return 0;
12 }
13
14 void namaste() {
15     printf("Namaste\n");
16     bonjour();
17 }
18
19 void bonjour() {
20     printf("Bonjour\n");
21 }
```

Hello.c

```
1 #include <stdio.h>
2
3 int sum(int a, int b);
4
5 int main() {
6     int a, b;
7     printf("enter first number : ");
8     scanf("%d", &a);
9     printf("enter second number : ");
10    scanf("%d", &b);
11
12    int s = sum(a, b);
13    printf("sum is %d : ", s);
14    return 0;
15}
16
17 int sum(int x, int y) {
18     return x + y;
19}
```

Hello.c

```
1 #include <stdio.h>
2
3 void calculatePrice(float value);
4
5 int main() {
6     float value = 100.0;
7     calculatePrice(value);
8     printf("value is : %f", value);
9     return 0;
10 }
11
12 void calculatePrice(float value) {
13     value = value + (0.18 * value);
14     printf("final price is : %f", value);
15 }
16
```

Hello.c

```
1 #include <stdio.h>
2
3 int sum(int a, int b);
4 void printTable(int n);
5
6 int main() {
7     int n;
8     printf("enter number : ");
9     scanf("%d", &n);
10
11     printTable(n); //argument/ actual parameter
12
13     return 0;
14 }
15
16 int sum(int x, int y) {
17     return x + y;
18 }
19
20 void printTable(int n) { //parameter/formal parameter
21     for(int i = 1; i <= 10; i++) {
22         printf("%d\n", i * n);
23     }
24 }
```

Hello.c

```
1 #include <stdio.h>
2 #include<math.h>/a/
3
4 void calculatePrice(float value);
5
6 int main() {
7     //float value = 100.0;
8     // calculatePrice(value);
9     // printf("value is : %f\n", value);
10
11 int n = 4;
12 printf("%f", pow(n, 2));
13
14 return 0;
15 }
16
17
18
19
```

Hello.c

```
1 #include <stdio.h>
2 #include<math.h>
3
4 float squareArea(float side);
5 float circleArea(float rad);
6 float rectangleArea(float a, float b);
7
8 int main() {
9     float a = 5.0;
10    float b =10.0;
11
12    printf("area is : %f", rectangleArea(a, b));
13    return 0;
14 }
15
16 float squareArea(float side) {
17     return side * side;
18 }
19
20 float circleArea(float rad) {
21     return 3.14 * rad *rad;
22 }
23
24 float rectangleArea(float a, float b) {
25     return a * b;
26 }
```

Hello.c

```
1 #include <stdio.h>
2
3 int fact(int n);
4
5 int main() {
6     printf("factorial is : %d", fact(4));
7     return 0;
8 }
9
10 int fact(int n) {
11     if(n == 0) {
12         return 1;
13     }
14     int factNm1 = fact(n-1);
15     int factN = factNm1 * n;
16 }
17
```

Hello.c

```
1 #include <stdio.h>
2
3 void printHW(int count);
4
5 int main() {
6     printHW(5);
7     return 0;
8 }
9
10 //recursive function
11 void printHW(int count) {
12     if(count == 0) {
13         return;
14     }
15     printf("Hello World\n");
16     printHW(count-1);
17 }
18
19
```

Hello.c

```
1 #include <stdio.h>
2
3 int fact(int n);
4
5 int main() {
6     printf("factorial is : %d", fact(4));
7     return 0;
8 }
9
10 int fact(int n) {
11     printf("calcculate fact of n : %d\n", n);
12     int factNm1 = fact(n-1);
13     int factN = factNm1 * n;
14     return factN;
15 }
16
```

hello.c

```
1 #include <stdio.h>
2
3 int main(){
4     int a, b;
5     printf("enter a");
6     scanf("%d", &a);
7
8     printf("enter b");
9     scanf("%d", &b);
10
11    int sum = a + b;
12    printf("sum is : %d", sum);
13
14    return 0;
15 }
16
```

firstsk.c

```
1 #include <stdio.h>
2
3 int main(){
4     int number;
5     printf("enter number : ");
6     scanf("%d", &number);
7
8     if (number >= 0) {
9         printf("positive \n");
10        if (number %2 == 0) {
11            printf("even \n");
12
13        } else {
14            printf("odd \n");
15
16        }
17
18    } else {
19        printf("negative \n");
20    }
21
22    return 0;
23 }
24 }
```

Hello.c

```
1 #include <stdio.h>
2
3 int fact(int n);
4
5 int main() {
6     printf("factorial is : %d", fact(4));
7     return 0;
8 }
9
10 int fact(int n) {
11     printf("calculate fact of n : %d\n", n);
12     int factNm1 = fact(n-1);
13     int factN = factNm1 * n;
14     return factN;
15 }
16
```

Hello.c

```
1 #include <stdio.h>
2
3 float convertTemp(float celsius);
4 int main() {
5     float far = convertTemp(37);
6     printf("far : %f", far);
7     return 0;
8 }
9
10 float convertTemp(float celsius) {
11     float far = celsius * (9.0/5.0) + 32;
12     return far;
13 }
14
```

Hello.c

```
1 #include <stdio.h>
2
3 int calcPercentage(int science, int math, int sanskrit);
4
5 int main() {
6     int sc = 98;
7     int math = 95;
8     int sanskrit = 99;
9
10    printf("percentage = %d\n", calcPercentage(sc, math, sanskrit));
11    return 0;
12}
13}
14int calcPercentage(int science, int math, int sanskrit) {
15    return ((science + math + sanskrit) / 3);
16}
```

Hello.c

```
1 #include <stdio.h>
2
3 int fib(int n);
4
5 int main() {
6     fib(6);
7     return 0;
8 }
9
10 int fib(int n) {
11     if(n == 0 || n == 1) {
12         if (n == 0) {
13             return 0;
14         }
15         if (n == 1) {
16             return 1;
17         }
18     }
19
20     int fibNm1 = fib(n-1);
21     int fibNm2 = fib(n-2);
22     int fibN = fibNm1 + fibNm2;
23     printf("fib of %d is : %d \n", n, fibN);
24     return fibN;
25 }
26
```

Hello.c

```
1 #include <stdio.h>
2
3 int fib(int n);
4
5 int main() {
6     printf("%d", fib(6));
7     return 0;
8 }
9
10 int fib(int n) {
11     if(n == 0 || n == 1) {
12         if (n == 0) {
13             return 0;
14         }
15         if (n == 1) {
16             return 1;
17         }
18     }
19
20     int fibNm1 = fib(n-1);
21     int fibNm2 = fib(n-2);
22     int fibN = fibNm1 + fibNm2;
23     printf("fib of %d is : %d \n", n, fibN);
24     return fibN;
25 }
26
```

Hello.c

```
1 #include <stdio.h>
2
3 int fact(int n);
4
5 int main() {
6     int age = 22;
7     int *ptr = &age;
8     int _age = *ptr;
9
10    printf("%d", _age);
11    return 0;
12 }
13
```

Hello.c

```
1 #include <stdio.h>
2
3 int main() {
4     int age = 22;
5     int *ptr = &age;
6
7     //address
8     printf("%p\n", &age);
9     printf("%u\n", &age);
10
11    printf("%u\n", ptr);
12
13    return 0;
14 }
```

Hello.c

```
1 #include <stdio.h>
2
3 int main() {
4     int age = 22;
5     int *ptr = &age;
6
7     //value
8     printf("%d\n", age);
9     printf("%d\n", *ptr);
10    printf("%d\n", *(&age));
11    return 0;
12 }
```

Hello.c

```
1 #include <stdio.h>
2
3 int main() {
4     int x;
5     int *ptr;
6
7     ptr = &x;
8     *ptr = 0; // x = 0
9
10    printf("x = %d\n", x); // 0
11    printf("*ptr = %d\n", *ptr); // 0
12
13    return 0;
14 }
```

Hello.c

```
1 #include <stdio.h>
2
3 int main() {
4     int x;
5     int *ptr;
6
7     ptr = &x;
8     *ptr = 0; // x = 0
9
10    printf("x = %d\n", x); // 0
11    printf("*ptr = %d\n", *ptr); // 0
12
13    *ptr = 5; // x = 5
14
15    printf("x = %d\n", x); // 5
16    printf("*ptr = %d\n", *ptr); // 5
17    return 0;
18 }
```

Hello.c

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

Hello.c

```
1 #include <stdio.h>
2
3 int main() {
4
5     // float price = 100.00;
6     //float *ptr = &price;
7     //float **pptr = &ptr;
8
9     int i = 5;
10    int *ptr = &i;
11    int **pptr = &ptr;
12
13    printf("%d\n", **pptr);
14    return 0;
15 }
```

Hello.c

```
1 #include <stdio.h>
2
3 void square(int n);
4 int main() {
5     int number = 4;
6     square(number);
7     printf("number = %d\n", number);
8     return 0;
9 }
10 //call by value
11 void square(int n) {
12     n = n * n;
13     printf("square = %d\n", n);
14 }
```

Hello.c

```
1 #include <stdio.h>
2
3 void square(int n);
4 void _square(int *n);
5 int main() {
6     int number = 4;
7     square(number);
8     printf("number = %d\n", number);
9
10    _square(&number);
11    printf("number = %d\n", number);
12    return 0;
13 }
14 //call by value
15 void square(int n) {
16     n = n * n;
17     printf("square = %d\n", n);
18 }
19
20
21 void _square(int *n) {
22     *n = (*n) * (*n);
23     printf("square = %d\n", *n);
24 }
```

Hello.c

```
1 #include <stdio.h>
2
3 void swap(int a, int b);
4
5 int main() {
6     int x = 3, y = 5;
7     swap(x, y);
8     printf("x = %d & y = %d\n", x, y);
9     return 0;
10 }
11
12 //call by value
13 void swap(int a, int b) {
14     int t = a;
15     a = b;
16     b = t;
17     printf("a = %d & b = %d\n", a, b);
18 }
```

Hello.c

```
1 #include <stdio.h>
2
3 void _swap(int *a, int *b);
4
5 int main() {
6     int x = 3, y = 5;
7     _swap(&x, &y);
8     printf("x = %d & y = %d\n", x, y);
9     return 0;
10 }
11
12 //call by reference
13 void _swap(int *a, int *b) {
14     int t = *a;
15     *a = *b;
16     *b = t;
17     printf("a = %d & b = %d\n", *a, *b);
18 }
19
```

Hello.c

```
1 #include <stdio.h>
2
3 void printAddress(int n);
4
5 int main() {
6     int n = 4;
7     printf("address of n is : %u\n", &n);
8     printAddress(n);
9
10    return 0;
11 }
12
13 void printAddress(int n) {
14     printf("address of n is : %u\n", &n);
15 }
```

Hello.c

```
1 #include <stdio.h>
2
3 void printAddress(int *n);
4
5 int main() {
6     int n = 4;
7     printAddress(&n);
8     printf("address of n is : %u\n", &n);
9
10    return 0;
11 }
12
13 void printAddress(int *n) {
14     printf("address of n is : %u\n", n);
15 }
```

Hello.c

```
1 #include <stdio.h>
2
3 void doWork(int a, int b, int *sum, int *prod, int *avg);
4
5 int main() {
6     int a = 3, b = 5;
7     int sum, prod, avg;
8     doWork(a, b, &sum, &prod, &avg);
9
10    printf("sum = %d, prod = %d, avg = %d\n", sum, prod, avg);
11
12    return 0;
13}
14
15 void doWork(int a, int b, int *sum, int *prod, int *avg) {
16     *sum = a + b;
17     *prod = a * b;
18     *avg = (a + b) / 2;
19 }
```

Hello.c

```
1 #include <stdio.h>
2
3 int main() {
4     // int marks1 = 97;
5     // int marks2 = 98;
6     // int marks3 = 89;
7
8     int marks[3];
9     printf("enter phy : ");
10    scanf("%d", &marks[0]);
11
12    printf("enter che : ");
13    scanf("%d", &marks[1]);
14
15    printf("enter math : ");
16    scanf("%d", &marks[2]);
17
18    printf("phy : %d, che : %d, math : %d\n", marks[0], marks[1], marks[2]);
19
20    return 0;
21 }
```

Hello.c

```
1 #include <stdio.h>
2
3 int main() {
4     float price[3];
5     printf("enter 3 prices: ");
6     scanf("%f", &price[0]);
7     scanf("%f", &price[1]);
8     scanf("%f", &price[2]);
9
10    printf("total price 1 : %f\n", price[0]+(0.18*price[0]));
11    printf("total price 2 : %f\n", price[1]+(0.18*price[1]));
12    printf("total price 3 : %f\n", price[2]+(0.18*price[2]));
13
14    return 0;
15 }
16
```

Hello.c

```
1 #include <stdio.h>
2
3 int main() {
4     int age = 22;
5     int *ptr = &age;
6     printf("ptr = %u", ptr);
7     ptr++;
8     printf("\nptr = %u", ptr);
9     ptr--;
10    printf("\nptr = %u", ptr);
11    return 0;
12 }
13
```

Hello.c

```
1 #include <stdio.h>
2
3 int main() {
4     float price = 100.00;
5     float *ptr = &price;
6     printf("ptr = %u", ptr);
7     ptr++;
8     printf("\nptr = %u", ptr);
9     ptr--;
10    printf("\nptr = %u", ptr);
11    return 0;
12 }
13
```

Hello.c

```
1 #include <stdio.h>
2
3 int main() {
4     char * star = '*';
5     char * ptr = &star;
6     printf("ptr = %u", ptr);
7     ptr++;
8     printf("\nptr = %u", ptr);
9     ptr--;
10    printf("\nptr = %u", ptr);
11    return 0;
12 }
13
```

Hello.c

```
1 #include <stdio.h>
2
3 int main() {
4     int age = 22;
5     int _age = 23;
6     int *ptr = &age;
7     int *_ptr = &_age;
8
9     printf("%u, %udifference = %u\n", ptr, _ptr, ptr-_ptr);
10    _ptr = &age;
11    printf("comparison = %u\n", ptr == _ptr);
12    return 0;
13 }
14
```

Hello.c

```
1 #include <stdio.h>
2
3 int main() {
4     int aadhar[10];
5
6     //input
7     int *ptr = &aadhar[0];
8     for(int i = 0; i < 10; i++) {
9         printf("%d index : ", i);
10        scanf("%d", ptr + i);
11    }
12
13    //output
14    for(int i = 0; i < 10; i++) {
15        printf("%d index : %d\n", i, *(ptr + i));
16    }
17
18    return 0;
19 }
20 }
```

Hello.c

```
1 #include <stdio.h>
2
3 int main() {
4     int aadhar[10];
5
6     //input
7     int *ptr = &aadhar[0];
8     for(int i = 0; i < 10; i++) {
9         printf("%d index : ", i);
10        scanf("%d", &aadhar[i]);
11    }
12
13    //output
14    for(int i = 0; i < 10; i++) {
15        printf("%d index = %d\n", i, aadhar[i]);
16    }
17
18    return 0;
19 }
20
```

Hello.c

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

Hello.c

```
1 #include <stdio.h>
2
3 void printNumbers(int arr[], int n);
4
5 int main() {
6     // 2 x 3 array
7     int marks[2][3]; // --- // ---
8     marks[0][0] = 90;
9     marks[0][1] = 89;
10
11    marks[1][0] = 90;
12    marks[1][1] = 89;
13    marks[1][2] = 78;
14
15    printf("%d\n",marks[0][0]);
16    return 0;
17 }
18
```

Hello.c

```
1 #include <stdio.h>
2
3 int countOdd(int arr[], int n);
4
5 int main() {
6     int arr[] = {1, 2, 3, 4, 5, 6};
7     printf("%d", countOdd(arr, 6));
8     return 0;
9
10 }
11
12 int countOdd(int arr[], int n) {
13     int count = 0;
14     for(int i=0; i<n; i++) {
15         if(arr[i] % 2 != 0) { //odd
16             count++;
17         }
18     }
19
20     return count;
21 }
22 }
```

Hello.c

```
1 #include <stdio.h>
2
3 int countOdd(int arr[], int n);
4 void countEven(int arr[], int n);
5 void printArray(int arr[], int n);
6
7 int main() {
8     int arr[] = {1, 2, 3, 4, 5};
9     reverse(arr, 5);
10    printArray(arr, 5);
11    return 0;
12 }
13
14 void printArray(int arr[], int n) {
15     for(int i=0; i<n; i++) {
16         printf("%d\t ", arr[i]);
17     }
18     printf("\n");
19 }
20 void reverse(int arr[], int n) {
21
22     for(int i=0; i<n/2; i++) {
23         int firstVal = arr[i];
24         int secondVal = arr[n-i-1];
25         arr[i] = secondVal;
26         arr[n-i-1] = firstVal;
27     }
28 }
29 int countOdd(int arr[], int n) {
30     int count = 0;
31     for(int i=0; i<n; i++) {
32         if(arr[i] % 2 != 0) { //odd
33             count++;
34         }
35     }
36
37     return count;
38 }
39
```

Hello.c

```
1 #include <stdio.h>
2
3 //int countOdd(int arr[], int n);
4 //void countEven(int arr[], int n);
5 //void printArray(int arr[], int n);
6
7 int main() {
8     int n;
9     printf("enter n (n>2): ");
10    scanf("%d", &n);
11
12    int fib[n];
13    fib[0] = 0;
14    fib[1] = 1;
15
16    for(int i=2; i<n; i++) { // 1, 2, 3, 5...
17        fib[i] = fib[i-1] + fib[i-2]; // important
18        printf("%d\t ", fib[i]);
19    }
20    printf("\n");
21    return 0;
22}
23
24
```

Hello.c

```
1 #include <stdio.h>
2
3 //int countOdd(int arr[], int n);
4 //void countEven(int arr[], int n);
5 //void printArray(int arr[], int n);
6
7 void storeTable(int arr[][10], int n, int m, int number);
8
9 int main() {
10     int tables[2][10];
11     storeTable(tables, 0, 10, 2);
12     storeTable(tables, 1, 10, 3);
13
14     for(int i = 0; i < 10; i++) { // 0 to 10
15         printf("%d\t", tables[0][i]);
16     }
17     printf("\n");
18
19     for(int i = 0; i < 10; i++) { // 0 to 10
20         printf("%d\t", tables[1][i]);
21     }
22     printf("\n");
23     return 0;
24 }
25 void storeTable(int arr[][10], int n, int m, int number) {
26     for(int i = 0; i < 10; i++) { // 0 to 10
27         arr[n][i] = number * (i + 1); // 2, 4, 6, 8, 10...
28     }
29
30 }
```

Hello.c

```
1 #include <stdio.h>
2
3 void printString(char arr[]);
4
5 int main() {
6     char firstName[] = "Shubham";
7     char lastName[] = "Kumar";
8
9     printString(firstName);
10    printString(lastName);
11    return 0;
12 }
13
14 void printString(char arr[]) {
15     for(int i=0; arr[i] != '\0'; i++) {
16         printf("%c", arr[i]);
17     }
18     printf("\n");
19 }
20
```

Hello.c

```
1 #include <stdio.h>
2
3 void printString(char arr[]);
4
5 int main() {
6     char firstname[50];
7     scanf("%s", firstname);
8     printf("your name is: %s\n", firstname);
9     return 0;
10 }
11
12 void printString(char arr[]) {
13     for(int i=0; arr[i] != '\0'; i++) {
14         printf("%c", arr[i]);
15     }
16     printf("\n");
17 }
```

Hello.c

```
1 #include <stdio.h>
2
3 void printString(char arr[]);
4
5 int main() {
6     //char firstname[50];
7     //scanf("%s", firstname);
8     //printf("your name is: %s\n", firstname);
9
10    char fullname[100];
11    scanf("%s", fullname);
12    printf("your full name is: %s\n", fullname);
13    return 0;
14 }
15
16 void printString(char arr[]) {
17     for(int i=0; arr[i] != '\0'; i++) {
18         printf("%c", arr[i]);
19     }
20     printf("\n");
21 }
22 }
```

Hello.c

```
1 #include <stdio.h>
2
3 void printString(char arr[]);
4
5 int main() {
6     //char firstname[50];
7     //scanf("%s", firstname);
8     //printf("your name is: %s\n", firstname);
9
10    char str[100];
11    gets(str);
12    puts(str);
13
14    return 0;
15}
16
17 void printString(char arr[]) {
18 for(int i=0; arr[i] != '\0'; i++) {
19     printf("%c", arr[i]);
20 }
21     printf("\n");
22 }
```

Hello.c

```
1 #include <stdio.h>
2
3 void printString(char arr[]);
4
5 int main() {
6     //char firstname[50];
7     //scanf("%s", firstname);
8     //printf("your name is: %s\n", firstname);
9
10    char str[100];
11    fgets(str, 100, stdin);
12    puts(str);
13
14
15    return 0;
16}
17
18 void printString(char arr[]) {
19    for(int i=0; arr[i] != '\0'; i++) {
20        printf("%c", arr[i]);
21    }
22    printf("\n");
23}
24
```

Hello.c

```
1 #include <stdio.h>
2
3 void printString(char arr[]);
4
5 int main() {
6     //char firstname[50];
7     //scanf("%s", firstname);
8     //printf("your name is: %s\n", firstname);
9
10    //char str[100];
11    //fgets(str, 100, stdin);
12    //puts(str);
13
14    char *canChange = "Hello World";
15    puts(canChange);
16    canChange = "Hello";
17    puts(canChange);
18
19
20
21    return 0;
22}
23
24 void printString(char arr[]) {
25    for(int i=0; arr[i] != '\0'; i++) {
26        printf("%c", arr[i]);
27    }
28    printf("\n");
29}
30
```

Hello.c

```
1 #include <stdio.h>
2
3 void printString(char arr[]);
4 int countLength(char arr[]);
5
6 int main() {
7     char name[100];
8     fgets(name, 100, stdin);
9     printf("length is : %d", countLength(name));
10
11     return 0;
12 }
13
14 int countLength(char arr[]) {
15     int count = 0;
16     for(int i=0; arr[i] != '\0'; i++) {
17         count++;
18     }
19     return count-1;
20 }
21
22 void printString(char arr[]) {
23     for(int i=0; arr[i] != '\0'; i++) {
24         printf("%c", arr[i]);
25     }
26     printf("\n");
27 }
28 }
```

Hello.c

```
1 #include <stdio.h>
2 #include <string.h>
3
4 void printString(char arr[]);
5 int countLength(char arr[]);
6
7 int main() {
8     char name[] = "Shubham";
9     int length = strlen(name);
10    printf("length is : %d", strlen(name));
11    return 0;
12 }
13
14 int countLength(char arr[]) {
15     int count = 0;
16     for(int i=0; arr[i] != '\0'; i++) {
17         count++;
18     }
19     return count-1;
20 }
21
22 void printString(char arr[]) {
23     for(int i=0; arr[i] != '\0'; i++) {
24         printf("%c", arr[i]);
25     }
26     printf("\n");
27 }
28
```

Hello.c

```
1 #include <stdio.h>
2 #include <string.h>
3
4 void printString(char arr[]);
5 int countLength(char arr[]);
6
7 int main() {
8     //char oldStr[] = "oldStr";
9     //char newStr = "newStr";
10    //strcpy(newStr, oldStr);
11    //puts(newStr);
12
13    char firstStr[100] = "Hello ";
14    char secondStr[100] = "World";
15    strcat(firstStr, secondStr);
16    puts(firstStr);
17
18 }
```

Hello.c

```
1 #include <stdio.h>
2 #include <string.h>
3
4 void printString(char arr[]);
5 int countLength(char arr[]);
6
7 int main() {
8     char firstStr[] = "HHH";
9     char secondStr[] = "HHH";
10    printf("%d\n", strcmp(firstStr, secondStr));
11
12 }
13
```

Hello.c

```
1 #include <stdio.h>
2 #include <string.h>
3
4 void printString(char arr[]);
5 int countLength(char arr[]);
6
7 int main() {
8     char firstStr[] = "Apple";
9     char secondStr[] = "Banana";
10    printf("%d\n", strcmp(firstStr, secondStr));
11
12 }
13
```

Hello.c

```
1 #include <stdio.h>
2 #include <string.h>
3
4 void printString(char arr[]);
5 int countLength(char arr[]);
6
7 int main() {
8     char str[100];
9     char ch;
10    int i = 0;
11
12    while(ch != '\n') {
13        scanf("%c", &ch);
14        str[i] = ch;
15        i++;
16    }
17    str[i] = '\0';
18    puts(str);
19}
20
```

Hello.c

```
1 #include <stdio.h>
2 #include <string.h>
3
4 void printString(char arr[]);
5 int countLength(char arr[]);
6 void salting(char password[]);
7
8 int main() {
9     char password[100];
10    scanf("%s", password);
11    salting(password);
12
13 }
14
15 void salting(char password[]) {
16     char salt[] = "123";
17     char newPass[200];
18
19     strcpy(newPass, password); // newPass = "test"
20     strcat(newPass, salt); // newPass = "test" + "123"
21     puts(newPass);
22 }
23
```

Hello.c

```
1 #include <stdio.h>
2 #include <string.h>
3
4 void printString(char arr[]);
5 int countLength(char arr[]);
6 void salting(char password[]);
7 void slice(char str[], int n, int m);
8
9 int main() {
10     char str[] = "HelloWorld";
11     slice(str, 3, 6);
12 }
13
14 void slice(char str[], int n, int m) {
15     char newStr[100];
16     int j = 0;
17     for(int i=n; i<=m; i++, j++) {
18         newStr[j] = str[i];
19     }
20     newStr[j] = '\0';
21     puts(newStr);
22 }
23
```

Hello.c

```
1 #include <stdio.h>
2 #include <string.h>
3
4 void printString(char arr[]);
5 int countLength(char arr[]);
6 void salting(char password[]);
7 void slice(char str[], int n, int m);
8 int countVowels(char str[]);
9
10 int main() {
11     char str[] = "Shubham Kumar";
12     printf("Vowels are : %d", countVowels(str));
13 }
14
15
16 int countVowels(char str[]) {
17     int count = 0;
18
19     for(int i=0; str[i] != '\0'; i++) {
20         if(str[i] == 'a' || str[i] == 'e' || str[i] == 'i'
21             || str[i] == 'o' || str[i] == 'u' ) {
22             count++;
23         }
24     }
25     return count;
26 }
27 }
28 }
```

Hello.c

```
1 #include <stdio.h>
2 #include <string.h>
3
4 // void printString(char arr[]);
5 // int countLength(char arr[]);
6 // void salting(char password[]);
7 // void slice(char str[], int n, int m);
8 // int countVowels(char str[]);
9
10 void checkChar(char str[], char ch);
11
12 int main() {
13     char str[] = "Shubham Kumar";
14     char ch = 'a';
15     checkChar(str, ch);
16 }
17
18 void checkChar(char str[], char ch) {
19     for(int i=0; str[i] != '\0'; i++) {
20         if(str[i] == ch) {
21             printf("Character is present!");
22             return;
23         }
24     }
25     printf("Character is Not present! ");
26 }
```

Hello.c

```
1 #include <stdio.h>
2 #include <string.h>
3
4 // void printString(char arr[]);
5 // int countLength(char arr[]);
6 // void salting(char password[]);
7 // void slice(char str[], int n, int m);
8 // int countVowels(char str[]);
9
10 void checkChar(char str[], char ch);
11
12 int main() {
13     char str[] = "Shubham Kumar";
14     char ch = 'e';
15     checkChar(str, ch);
16 }
17
18 void checkChar(char str[], char ch) {
19     for(int i=0; str[i] != '\0'; i++) {
20         if(str[i] == ch) {
21             printf("Character is present!");
22             return;
23         }
24     }
25     printf("Character is Not present! ");
26 }
```

Hello.c

```
1 #include <stdio.h>
2 #include <string.h>
3
4 // user defined
5 struct student {
6     int roll;
7     float cgpa;
8     char name[100];
9 };
10
11 int main() {
12     struct student s1;
13     s1.roll = 12025;
14     s1.cgpa = 9.5;
15     // s1.name = "Shubham Kumar";
16     strcpy(s1.name, "Shubham Kumar");
17
18     printf("student name = %s", s1.name);
19     printf("\nstudent roll = %d", s1.roll);
20     printf("\nstudent cgpa = %.2f", s1.cgpa);
21
22     return 0;
23 }
24
```

Hello.c

```
1 #include <stdio.h>
2 #include <string.h>
3
4 // user defined
5 struct student {
6     int roll;
7     float cgpa;
8     char name[100];
9 };
10
11 int main() {
12     struct student s1;
13     s1.roll = 12025;
14     s1.cgpa = 9.5;
15     // s1.name = "Shubham Kumar";
16     strcpy(s1.name, "Shubham Kumar");
17
18     printf("\nstudent name = %s", s1.name);
19     printf("\nstudent roll = %d", s1.roll);
20     printf("\nstudent cgpa = %.2f", s1.cgpa);
21
22     struct student s2;
23     s2.roll = 12026;
24     s2.cgpa = 8.7;
25
26     strcpy(s2.name, "rajat");
27     // s2.name = "rajat";
28     printf("\nstudent name = %s", s2.name);
29     printf("\nstudent roll = %d", s2.roll);
30     printf("\nstudent cgpa = %.2f", s2.cgpa);
31
32     struct student s3;
33     s3.roll = 12027;
34     s3.cgpa = 8.5;
35
36     strcpy(s3.name, "raj");
37     // s3.name = "raj";
38     printf("\nstudent name = %s", s3.name);
39     printf("\nstudent roll = %d", s3.roll);
40     printf("\nstudent cgpa = %.2f", s3.cgpa);
41
42     return 0;
43 }
44
```

Hello.c

```
1 #include <stdio.h>
2 #include <string.h>
3
4 // user defined
5 struct student {
6     int roll;
7     float cgpa;
8     char name[100];
9 };
10
11 int main() {
12     struct student ece[100];
13     ece[0].roll = 12025;
14     ece[0].cgpa = 9.5;
15     strcpy(ece[0].name, "Shubham Kumar");
16
17     printf("Roll: %s\n", ece[0].name);
18     printf("Roll: %d\n", ece[0].roll);
19     printf("CGPA: %.2f\n", ece[0].cgpa);
20
21
22     return 0;
23 }
24
```

Hello.c

```
1 #include <stdio.h>
2 #include <string.h>
3
4 // user defined
5 struct student {
6     int roll;
7     float cgpa;
8     char name[100];
9 };
10
11 int main() {
12     struct student s1 = {12025, 9.5, "Shubham Kumar"};
13     printf ("student roll = %d\n", s1.roll);
14     printf ("student cgpa = %.2f\n", s1.cgpa);
15     printf ("student name = %s\n", s1.name);
16
17
18     return 0;
19 }
20
```

Hello.c

```
1 #include <stdio.h>
2 #include <string.h>
3
4 // user defined
5 struct student {
6     int roll;
7     float cgpa;
8     char name[100];
9 };
10
11 int main() {
12     struct student s1 = {12025, 9.5, "Shubham Kumar"};
13     printf ("student roll = %d\n", s1.roll);
14
15     struct student *ptr = &s1;
16     printf("student roll = %d\n", (*ptr).roll);
17
18
19     return 0;
20 }
21
```

Hello.c

```
1 #include <stdio.h>
2 #include <string.h>
3
4 // user defined
5 struct student {
6     int roll;
7     float cgpa;
8     char name[100];
9 };
10
11 int main() {
12     struct student s1 = {12025, 9.5, "Shubham Kumar"};
13     printf ("student roll = %d\n", s1.roll);
14
15     struct student *ptr = &s1;
16     printf("student roll = %d\n", (*ptr).roll);
17     printf("student-> roll = %d\n", ptr->roll);
18     printf("student-> cgpa = %f\n", ptr->cgpa);
19     printf("student-> name = %s\n", ptr->name);
20
21
22     return 0;
23 }
24
```

Hello.c

```
1 #include <stdio.h>
2 #include <string.h>
3
4 // user defined
5 struct student {
6     int roll;
7     float cgpa;
8     char name[100];
9 }
10
11 void printInfo(struct student s1);
12
13 int main() {
14     struct student s1 = {12025, 9.5, "Shubham Kumar"};
15     printInfo(s1);
16
17     // printf("student.roll = %d\n", s1.roll);
18
19     return 0;
20 }
21
22 void printInfo(struct student s1) {
23     printf("student information:\n");
24     printf("student.name = %s\n", s1.name);
25     printf("student.roll = %d\n", s1.roll);
26     printf("student.cgpa = %.2f\n", s1.cgpa);
27 }
```

Hello.c

```
1 #include <stdio.h>
2 #include <string.h>
3
4 // user defined
5 typedef struct student {
6     int roll;
7     float cgpa;
8     char name[100];
9 } stu ;
10
11 typedef struct computerengineeringstudent {
12     int roll;
13     float cgpa;
14     char name[100];
15 } coe;
16
17 int main() {
18     coe s1;
19     s1.roll = 12025;
20     s1.cgpa = 9.5;
21     strcpy(s1.name, "Shubham Kumar");
22
23     printf("student name is %s\n", s1.name);
24     printf("student roll is %d\n", s1.roll);
25     printf("student cgpa is %.2f\n", s1.cgpa);
26
27
28     return 0;
29 }
30
```