

```
A 1 - int number =56322;
    int count=0;
    int temp;

    for (temp=number; temp!=0; temp/=10) {
        count++; }

    printf("Count numbers %d",count);
```

```
A 2 - int number=563;
    int sum=0;
    int temp;

    for (temp=number; temp!=0 ; temp/=10) {
        sum+= temp%10; }

    printf("sum of digits %d",sum);
```

```
A 3 - int i=1;
    for (i=1;i<=10;i++) {
        printf("%d\n",i); }
```

```
A 4 - int i=1;
    for (i=1;i<=100;i++) {
        printf("%d\n",i); }
```

```
A 5 - int i=1;
    for (i=50;i<=1000;i++) {
        printf("%d\n",i); }
```

```
A 6 - int i=1;
    for (i=34;i<=89;i++) {
        printf("%d\n",i); }
```

```
A 7 - int i=5;
    for (i=5;i>=1;i--) {
        printf("%d\n",i); }
```

```
A 8 - int i=10;
    for (i=10;i>=1;i--) {
        printf("%d\n",i); }
```

```
A 9 - int i=100;
    for (i=100;i>=1;i--) {
        printf("%d\n",i); }
```

```
A 10 - int i=50;
    for (i=50;i>=1;i--) {
        printf("%d\n",i); }
```

```
A 11 - int i=78;
    for (i=78;i>=45;i--) {
        printf("%d\n",i); }
```

```
A 12 - int number=1;
    int sum=0;

    for (number=1; number<=10; number++) {
        sum=sum+number; }

    printf("sum %d",sum);
```

```
A 13 - int number=45;
    int sum=0;

    for (number=45; number<=89; number++) {
        sum=sum+number; }

    printf("sum %d",sum);
```

```
A 14 - int i=1;
    for (i=1;i<=10;i++) {
        if (i%2==0) {
            printf("even number %d\n",i); }
        else {
            printf(""); } }
```

```
}
```

```
A 15 - int i=1;
      for (i=1;i<=100;i++) {
        if (i%2==0) {
          printf("even number %d\n",i); }
        else {
          printf(""); }

      }
```

```
A 16 - int i=50;
      for (i=50;i<=100;i++) {
        if (i%2==0) {
          printf("even number %d\n",i); }
        else {
          printf(""); }

      }
```

```
A 17 - int i=67;
      for (i=67;i<=89;i++) {
        if (i%2==0) {
          printf("even number %d\n",i); }
        else {
          printf(""); }

      }
```

```
A 18 - int i=89;
      for (i=89;i>=67;i--) {
        if (i%2==0) {
          printf("even number %d\n",i); }
        else {
          printf(""); }

      }
```

```
A 19 - int i=100;
      for (i=100;i>=1;i--) {
        if (i%2==0) {
          printf("even number %d\n",i); }
```

```
else {  
    printf(""); }  
  
}
```

```
A 20 - int i=1;  
    int sum=0;  
    for (i=1; i<=100; i++) {  
        if (i%2==0) {  
            sum=sum+i; }  
  
    }  
  
    printf("%d",sum);
```

```
A 21 - int i=1;  
    int sum=0;  
    for (i=1; i<=100; i++) {  
        if (i%2==0) {  
            printf("%d\n",i);  
            sum=sum+i; }  
  
    }  
  
    printf("%d",sum);
```

```
A 22 - int i=100;  
    int sum=0;  
  
    for (i=100; i>=1; i--) {  
        if (i%2!=0) {  
            printf("%d\n",i);  
            sum=sum+i; }  
    }  
  
    printf("%d",sum);
```

```
A 23 - int i=1;
```

```
int a,b;
printf("starting point");
scanf("%d",&a);

printf("ending point");
scanf("%d",&b);

printf("even numbers from %d to %d\n",a,b);

for (i=a; i<=b; i++) {
    if (i%2==0) {
        printf("%d\n",i); } }
```

```
A 24 - char a;
int i=1;

printf("enter a character = ");
scanf("%c",&a);

    if (a=='a') {
        for (i=1; i<=10; i++) {
            printf("%d\n",i); } }

else {
    printf("character should be a"); }
```

```
A 25 - char a;
int i=45;

printf("enter a character = ");
scanf("%c",&a);

    if (a=='b') {
        for (i=45; i>=3; i--) {
            printf("%d\n",i); } }

else {
    printf("character should be b"); }
```

```

A 26 - char a,b;
int start,end;
int i=1;

printf("enter a character ");
scanf(" %c",&a);

if (a=='p') {
printf("enter e for even number o for odd number ");
scanf(" %c",&b);

printf("enter the starting point ");
scanf("%d",&start);

printf("enter the ending point ");
scanf("%d",&end);

if (b=='e'){
printf("even numbers from %d to %d are =\n", start,end);
for (int i=start; i<=end; i++) {
if (i%2==0) {
printf("%d\n",i); }}}

else if (b=='o'){
printf("odd from %d to %d are in backwards order =\n ", start,end);
for (int i=end; i>=start; i--) {
if (i%2!=0) {
printf("%d\n",i); }}}

else {
printf("invalid type enter e or o for odd or even number"); }}

else {
printf("invalid type enter p"); }

```

```

A 27 - char a, b;
int start, end;
int sum = 0;
int i = 1;

```

```

printf("enter the character = ");
scanf("%c", &a);

if (a == 's') {
    printf("\n for sum of numbers, e for sum of even numbers, o for sum of odd numbers ");
    scanf(" %c", &b);

    printf("starting point = ");
    scanf("%d", &start);
    printf("ending point = ");
    scanf("%d", &end);

    if (b == 'n') {
        printf("%d to %d sum of these numbers\n", start, end);
        for (i = start; i <= end; i++) {
            sum += i;
            printf("%d\n", sum);
        }
    } else if (b == 'e') {
        printf("%d to %d sum of these numbers of even numbers\n", start,
end); for (i = start; i <= end; i++) {
            if (i % 2 == 0) {
                printf("%d\n", i);
                sum += i;
            }
        }
        printf("Sum of even numbers: %d\n", sum);
    } else if (b == 'o') {
        printf("%d to %d sum of these numbers of odd numbers\n", start, end);
        for (i = start; i <= end; i++) {
            if (i % 2 != 0) {
                printf("%d\n", i);
                sum += i;
            }
        }
        printf("Sum of odd numbers: %d\n", sum);
    } else {
        printf("Character should be n, e, or o\n");
    }
} else {
    printf("Character should be 's'\n");
}

```

```
}
```

```
A 28 - int number=3;  
      int limit=10;
```

```
for (int i=1; i<=limit; i++) {  
    printf("%d*d=%d\n",number,i,number*i); }
```

```
A 29 - int number = 5; // Example number  
      int factorial = 1;
```

```
for (int i = 1; i <= number; i++) {  
    factorial *= i;  
}
```

```
printf("Factorial of %d is %d.\n", number, factorial);
```

```
A 30 - int n=10,first=0,second=2,next;
```

```
printf("fibonacci series %d",n);
```

```
for (int i = 0; i<=n ; i++) {  
    if (i<=1) {  
        next = i;  
    }
```

```
    else {  
        next=first + second;  
        first = second;  
        second = next; }
```

```
    printf("%d",next);
```

```
}
```