

statement after executing any one statement block.
continue statement:- The continue statement is used to transfer the control to the beginning of a statement block in a loop.

exit() function:- The exit() function is used to transfer the control to the end of a program. It uses one argument in () and the value is zero for normal termination or non-zero for abnormal termination.

Q. Write a C program to find the sum of the digits of any given positive integer.

Ans:- /* program to find sum of the digits of given integer */

```
#include <stdio.h>
main ()
{
    int n, r, r1, s;
    clrscr();
    printf ("\n Enter a positive integer: ");
    scanf ("%d", &n);
    r = n;
    s = 0;
    while (r > 0)
    {
        r1 = r % 10;
        s = s + r1;
        r = r / 10;
    }
    printf ("\n sum of digits = %d", s);
    getch();
}
```

Q. Write a C program to check whether the given number n is a prime number.

Ans: /* program to check prime number */

```
# include <stdio.h>
```

```
# include <conio.h>
```

```
main()
```

```
{
```

```
int n, k, flag = 0, r;
```

```
clrscr();
```

```
printf("Enter a positive integer: ");
```

```
scanf("%d", &n);
```

```
for (k = 2; k <= n/2 && flag = 0; k++)
```

```
{
```

```
    r = n % k;
```

```
    if (r == 0)
```

```
        flag = 1;
```

```
}
```

```
if (flag == 0)
```

```
    printf("%d is a prime number", n);
```

```
else
```

```
    printf("%d is not a prime number",
```

```
n);
```

```
getch();
```

```
}
```

Q. Write a C program to generate the Fibonacci

series, 0 1 1 2 3 5 8 ... up to n .

Ans: /* program to generate and print Fibonacci

series */

```
# include <stdio.h>
```

```
# include <conio.h>
```



```

main()
{
    int n, n1, n2, newterm;
    clrscr();
    printf("\n Enter the final term of the series:");
    scanf("%d", &n);
    n1 = 0;
    n2 = 1;
    printf("%d %d", n1, n2);
    newterm = n1 + n2;
    while (newterm <= n)
    {
        printf("%d", newterm);
        n1 = n2;
        n2 = newterm;
        newterm = n1 + n2;
    }
    getch();
}

```

Questions and Answers

1.Q:- Give differences betⁿ while and do-while statement.

Ans:- See above.

2.Q:- The _____ statement causes the loop to be terminated.

Ans:- break.

3.Q:- The continue statement is used to transfer the control to the _____ of the loop.

Ans:- beginning.

4.Q:- Distinguish betⁿ the break and continue statements in C. (2014, 2015).

Ans:- break statement

1. A break statement is used to terminate the execution of a statement block.
2. When a break statement is executed in a loop, the repetition of the loop will be terminated.

continue statement

1. A continue statement is used to transfer the control to the beginning of a statement block.
2. When a continue statement is executed in a loop, the execution is transferred to the beginning of the loop.

5.Q:- What happens if the condⁿ is a while loop is initially false? (2014)

Ans:- When the condⁿ is initially false, the statement block in that loop will not be executed.

6.Q:- What is the use of break statement? (2015)

Ans:- See above.

7.Q:- What is the use of continue statement? (2015)

Ans:- See above.

8.Q:- exit(0) in a C program represents _____.

Ans:- the termination of a program execution.

9.Q:- List a few unconditional control statements in C.

Ans:- ① break statement

② continue "

③ goto "

④ exit () "
