Control Statements

UNIT-III

C language has four types of control statements

1. if..else
2. goto
3. switch
4. loops
     - while
     - do..while
     - for

Compound Statement or Block

- Is a group of statements enclosed within the pair of curly braces. The statements inside the block are executed sequentially.

```
{

    statement1;

    statement2;

    statemnet3;

}
```
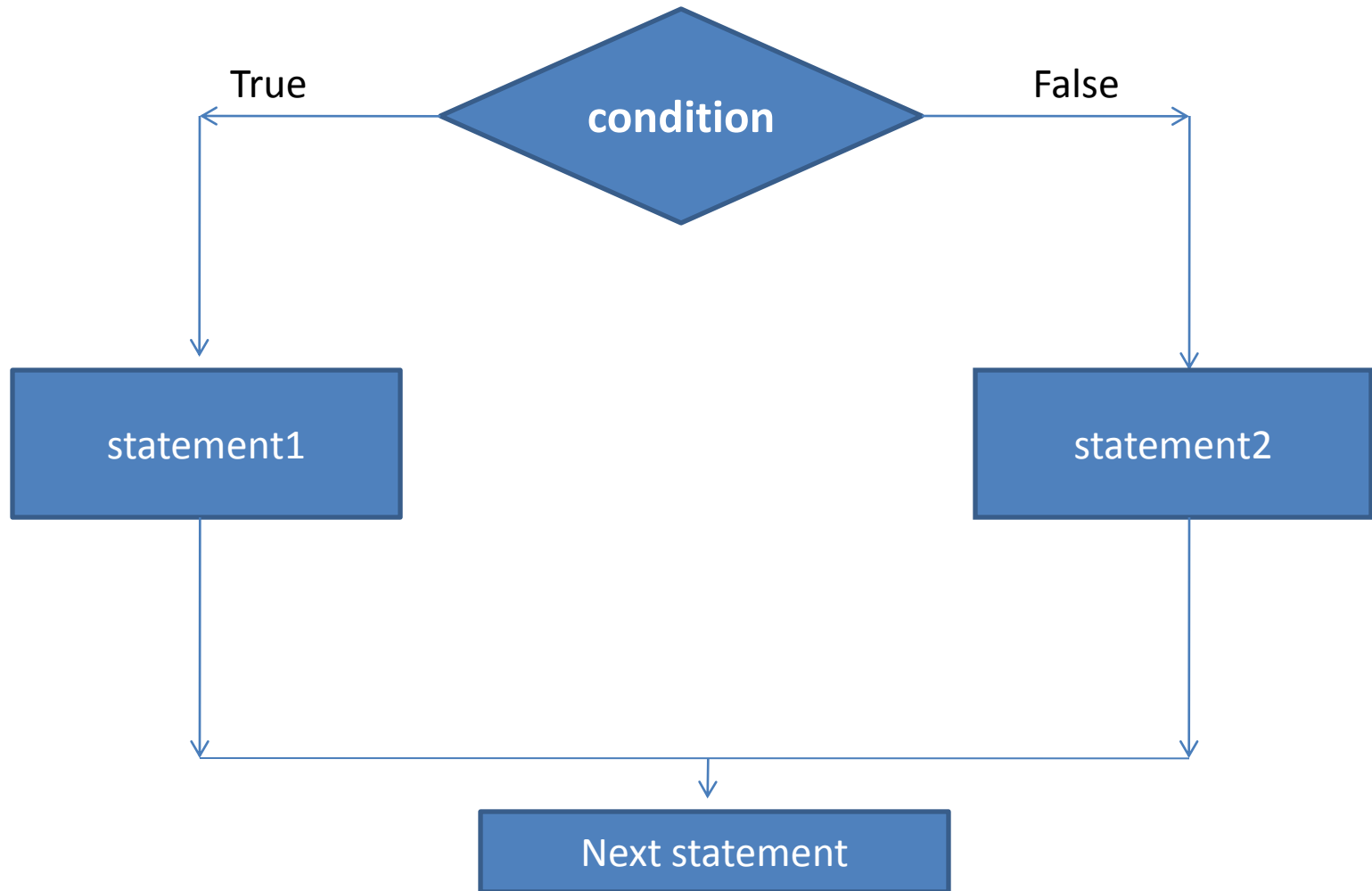
if..else

- <u>Syntax1</u>

if(condition)

    statement1;

- <u>Syntax2</u>

 if(condition)

   statement1;

 else

   statemnet2;

```
if(condition)
{
        statement1;
        statement2;
}
else
{
        statement3;
        statement4;
}
```

Flowchart of if..else
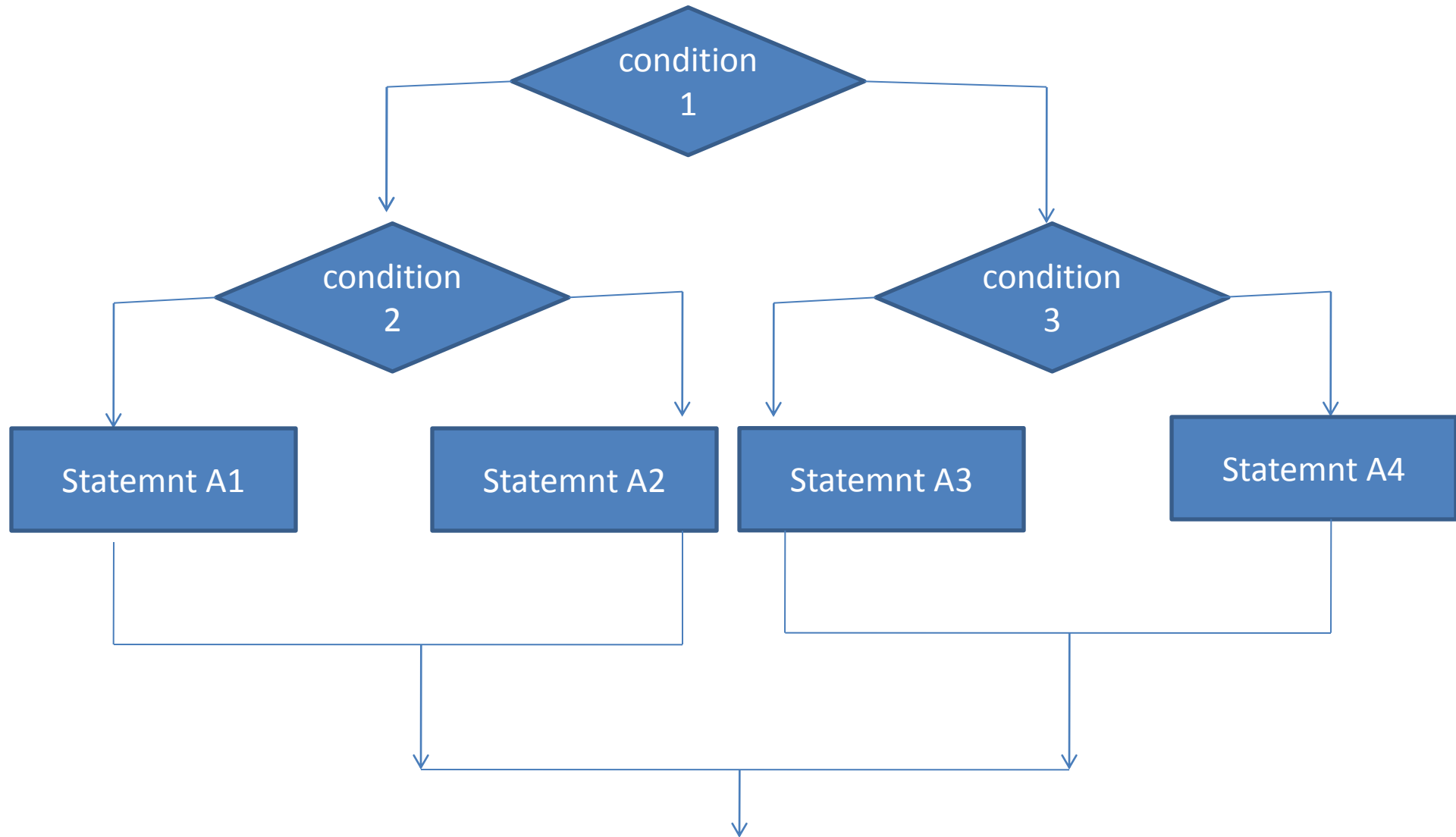
WAP to print whether the number is even or odd

```c
#include<stdio.h>
#include<conio.h>
void main()
{
int num;
clrscr();
scanf("%d", &num);
if(num%2==0)
    printf("num is even");
else
    printf("number is odd");
 getch();
}
```

Nesting of if…else

```
if(condition1)
{
    if(condition2)
        statement A1;
    else
        statement A2;
}
else
{
    if(condition3)
        statement A3;
    else
        statement A4;
}
```

Nesting of if…else

WAP to find largest among three numbers.

```c
#include<stdio.h>
#include<conio.h>
void main()
{
int a, b, c;
clrscr();
scanf("%d%d%d", &a,&b,&c);
if(a>b)
{
   if(a>c)
        printf("larger=a");
   else
        printf("larger=c");
}
else
{
        if(b>c)

        printf("larger=b");
        else

        printf("larger=c");
}
getch();
}
```

- WAP to find out the grade of a student when the marks of four subjects are given. The method of assigning grade is:

percent>=85   grade=A

percent<85 and percent>=70   grade=B

percent<70 and percent>=55   grade=C

percent<55 and percent>=40   grade=D

percent<40   grade=E

```c
#include<stdio.h>
#include<conio.h>
void main()
{
float m1,m2,m3,m4,total,per;
printf("enter marks of 4 subjects");
scanf("%f%f%f%f",&m1,&m2,&m3,&m4);
total=m1+m2+m3+m4;
per=(total/400)*100;
if(per>=85)
    printf("grade=A");
else if(per>=70)
        printf("grade=B");
else if(per>=55)
        printf("grade=C);
else if(per>=40)
        printf("grade=D");
    else
        printf("grade=E");
getch();
}
```