q2)
```c
#include <stdio.h>

int main() {
    int m1,m2,m3,m4,m5;
    printf("enter m1:\n");
    scanf("%d",&m1);
    printf("enter m2:\n");
    scanf("%d",&m2);
    printf("enter m3:\n");
    scanf("%d",&m3);
    printf("enter m4:\n");
    scanf("%d",&m4);
    printf("enter m5:\n");
    scanf("%d",&m5);

    int t=m1+m2+m3+m4+m5;
    printf("total marks is %d\n",t);
    float p=t/5;
    printf("your percentage is %f",p);

    return 0;
}
```

q1)
```c
#include<stdio.h>

int main()
{
int p,r,t;
    printf("enter principal amount:\n");
    scanf("%d",&p);
    printf("enter rate of interst:\n");
    scanf("%d",&r);
    printf("enter time period:\n");
    scanf("%d",&t);
    float s=(p*r*t)/100;
    printf("the simple interst is %f",s);
    return 0;
}
```

q3)// Gross Salary=Basic Salary+Allowances+Bonuses−Deductions
```c
#include <stdio.h>

int main() {
    int bs,b,a,d,gs;
    printf("enter basic salary:\n");
    scanf("%d",&bs);
    printf("enter allowances:\n");
    scanf("%d",&a);
    printf("enter bonuses:\n");
```

```
    scanf("%d",&b);
    printf("enter deductions:\n");
    scanf("%d",&d);

    gs=bs+b+a-d;
    printf("the gross salary is %d",gs);



    return 0;
}
```

q4)// PROGRAM TO CONVERT TEMPERATURE FROM FAHRENHEIT TO
//CENTIGRADE DEGREES.

```
#include <stdio.h>

int main() {
    int f;
    printf("enter temp in F:\n");
    scanf("%d",&f);

    float c;
    c=5.0/9.0*(f-32);
    printf("the temp in celsius is %f",c);


    return 0;
}
```

q5)

```
#include <stdio.h>

int main() {
    int a,b,c;
    printf("enter a:\n");
    scanf("%d",&a);
    printf("enter b:\n");
    scanf("%d",&b);

    printf("before swapping\n");
    printf("a:%d\n",a);
    printf("b:%d\n",b);

    c=a;
    a=b;
    b=c;

    printf("before swapping\n");
```

```
    printf("a:%d\n",a);
    printf("b:%d\n",b);


    return 0;
}
```

q6)

```
#include <stdio.h>

int main() {
    int a, b;


    printf("Enter value for a: ");
    scanf("%d", &a);
    printf("Enter value for b: ");
    scanf("%d", &b);


    a = a + b;
    b = a - b;
    a = a - b;


    printf("After swapping:\n");
    printf("a = %d\n", a);
    printf("b = %d\n", b);

    return 0;
}
```

q7)

```
#include <stdio.h>

int main() {
    int b,h;
    printf("enter height of triangle:\n");
    scanf("%d",&h);
    printf("enter base of triangle:\n");
    scanf("%d",&b);

    int a=(b*h)/2;
    printf("the area of triangle is %d",a);

    return 0;
}
```

q8)

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

```
int main() {
    int s,h,m,d,hours,minutes;
    s=31558150;
    m=s/60;
    h=m/60;
    d=h/24;
    hours=h%24;
    minutes=m%60;
    printf("earths period of revolution is %d days %d hours %d
minutes",d,hours,minutes);


    return 0;
}
```

q9)

```
#include <stdio.h>

int main() {
    int h,m,s;
    printf("enter number of hours:\n");\
    scanf("%d",&h);
    printf("enter number of minutes:\n");\
    scanf("%d",&m);
    printf("enter number of seconds:\n");\
    scanf("%d",&s);

    int seconds=h*60*60+m*60+s;

    printf("total number of seconds is %d",seconds);


    return 0;
}
```

q10)

```
/*10. WRITE A C PROGRAM TO CALCULATE THE CUT OFF
MARK OF A STUDENT USING THE FORMULA.
CM = M/2+P/2+C/2+E
WHERE CM = Cut of f mark
M = Marks in Mathematics out of 200
P = Marks in Physics out of 200
C = Marks in Chemistry out of 200
E = Marks in entrance examination out of 100*/


#include<stdio.h>
```

```
int main()
{
    int m,p,c,e;
    printf("enter mathematics marks:\n");
    scanf("%d",&m);
    printf("enter physics marks:\n");
    scanf("%d",&p);
    printf("enter chemistry marks:\n");
    scanf("%d",&c);
    printf("enter entrance examination marks:\n");
    scanf("%d",&e);

    float cm=(m/2)+(p/2)+(c/2)+e;

    printf("the cutoff marks is %.2f",cm);







    return 0;
}
```

q11)

```
#include<stdio.h>

int main()
{
    int s,m,h,d,hours,minutes;
    printf("enter time in seconds:\n");
    scanf("%d",&s);
    m=s/60;
    h=s/60;
    d=h/24;
    hours=h%60;
    minutes=m%60;

    printf("\nthe time is %d days %d hours %d minutes",d,hours,minutes);

}
```

q12)

```
#include<stdio.h>

int main()
{
```

```
    char a;
    printf("enter any character:\n");
    scanf("%c",&a);

    printf("the ascii value of character is %d",a);

}
```

q13)

```
#include<stdio.h>

int main()
{
    int a;

    printf("enter a number:\n");
    scanf("%d",&a);

    if(a%2==0)
        printf("the number is even");

    else
        printf("the number is odd");

}
```

q14)

```
#include <stdio.h>

int main() {
    char ch;

    printf("Enter a character: ");
    scanf("%c", &ch);


    if (ch >= 'A' && ch <= 'Z') {
        printf("The character '%c' is a capital letter.\n", ch);
    }
 else if (ch >= 'a' && ch <= 'z')
 {
        printf("The character '%c' is a small case letter.\n", ch);
    }
else if (ch >= '0' && ch <= '9') {
        printf("The character '%c' is a digit.\n", ch);
    }
 else {
        printf("The character '%c' is a special symbol.\n", ch);
```

```
    }

    return 0;
}
```

q16)

```
#include <stdio.h>

int main()
{
    int a,b,c;
    printf("enter a:");
    scanf("%d",&a);
    printf("enter b:");
    scanf("%d",&b);
    printf("enter c:");
    scanf("%d",&c);

    if(a>b && a>c)
    printf("the greatest number is %d",a);
    if(b>a && b>c)
    printf("the greatest number is %d",b);
    if(c>a && c>a)
    printf("the greatest number is %d",c);

    return 0;
}
```

q18)

```
#include <stdio.h>

int main() {
    int num1,num2,num3,max;
    printf("enter num1:\n");
    scanf("%d",&num1);
    printf("enter num2:\n");
    scanf("%d",&num2);
    printf("enter num3:\n");
    scanf("%d",&num3);

    max=num1>num2?num1:num2 &&num2>num3?num2:num3;

    printf("the greatest number is %d",max);

    return 0;
}
```

q20)

```c
#include <stdio.h>

int main() {
    char operator;

    printf("enter operator(+,-,*,/) you want to perform:\n");
    scanf(" %c",&operator);

    int a,b;
    printf("enter num1:\n");
    scanf("%d",&a);
    printf("enter num2:\n");
    scanf("%d",&b);

    int c;
    switch(operator){

        case '+':
        c=a+b;
        break;

        case '-':
        c=a-b;
        break;

        case '*':
        c=a*b;
        break;

        case '/':
        c=a/b;
        break;

    }
    printf("answer:%d",c);

    return 0;
}
```

q19)

```c
#include <stdio.h>

int main() {
    char c;
    printf("enter a character:\n");
    scanf("%c",&c);

    (c>='a' && c<='z')?printf("the entered charcter is small case"):printf("the
entered charcter is big case");
```

```
    return 0;


}

q22)//factorialof a number
#include<stdio.h>

int main()
{
    int n,product;
   printf("enter n:");
   scanf("%d",&n);

   int i=1;
   product=1;

   while(i<=n)
   {
    product=product*i;
    i++;

   }
   printf("n factorial is %d",product);

   return 0;


}



q21)

//calculator
#include<stdio.h>

int main()
{
    int a,b,c;
    char operator;
    printf("enter the operator you want to perform(+,-,/,*):");
    scanf("%c",&operator);
    printf("enter a:");
    scanf("%d",&a);
    printf("enter b:");
    scanf("%d",&b);

    switch(operator)
```

```
    {
        case '+':c=a+b;
        break;
        case '-':c=a-b;
        break;
        case '*':c=a*b;
        break;
        case '/':c=a/b;
        break;
        default: printf("invalid");

    }
    printf("answer=%d",c);

}
```

q15)

```
#include <stdio.h>

int main() {

    float mark1, mark2, mark3, mark4, mark5;
    float total, average;


    printf("Enter marks for 5 subjects:\n");
    printf("Subject 1: ");
    scanf("%f", &mark1);
    printf("Subject 2: ");
    scanf("%f", &mark2);
    printf("Subject 3: ");
    scanf("%f", &mark3);
    printf("Subject 4: ");
    scanf("%f", &mark4);
    printf("Subject 5: ");
    scanf("%f", &mark5);


    total = mark1 + mark2 + mark3 + mark4 + mark5;
    average = total / 5;


    printf("\nAverage Marks: %.2f\n", average);


    if (average >= 60) {
        printf("Division:A\n");
    } else if (average >= 50) {
        printf("Division: B\n");
```

```
    } else if (average >= 40) {
        printf("Division: C\n");
    } else {
        printf("Division: Fail\n");
    }

    return 0;
}
```

q20)

```
#include <stdio.h>

int main() {

    int operator_num;
    float num1, num2, result;


    printf("Simple Calculator\n");
    printf("1. Addition\n");
    printf("2. Subtraction\n");
    printf("3. Multiplication\n");
    printf("4. Division\n");
    printf("Enter your choice (1-4): ");
    scanf("%d", &operator_num);


    printf("Enter two numbers: \n");
    scanf("%f %f", &num1, &num2);


    switch (operator_num) {
        case 1:
            result = num1 + num2;
            printf("Result of addition: %.2f\n", result);
            break;
        case 2:
            result = num1 - num2;
            printf("Result of subtraction: %.2f\n", result);
            break;
        case 3:
            result = num1 * num2;
            printf("Result of multiplication: %.2f\n", result);
            break;
        case 4:
            if (num2 != 0) {
                result = num1 / num2;
                printf("Result of division: %.2f\n", result);
            } else {
```

```
                printf("Error: Division by zero is not allowed.\n");
            }
            break;
        default:
            printf("Invalid choice. Please enter a number between 1 and 4.\n");
            break;
    }

    return 0;
}
```