MD.AKASH

17.Write a C program to enter P, T, R and calculate Simple Interest.

```
#include <stdio.h>
int main()
{
   float a,t,r,si;
   printf("Enter amount time and rate.\n");
   scanf("%f%f%f",&a,&t,&r);
   si = (a*t*r)/100;
   printf("Simple Interest: %.2f\n",si);
   return 0;
}
```

18.Write a C program to enter P, T, R and calculate Compound Interest.

```
#include <stdio.h>
int main()
{
   float a,t,r,ci;
   printf("Enter amount time and rate.\n");
   scanf("%f%f%f",&a,&t,&r);
   ci = a*pow(1+(r/100),t);
   printf("Compound Interest: %.2f\n",ci);
   return 0;
}
```

19.Write a C program to find maximum between two numbers.

```
#include <stdio.h>
int main()
{
   float a,b;
   printf("Please Enter any two number: \n");
   scanf("%f%f",&a,&b);
   if(a>b){
      printf("The Maximum number is: %.2f\n",a);
   }
   else{
      printf("The Maximum number is: %.2f\n",b);
   }
   return 0;
}
```

20.Write a C program to find maximum between three numbers.

```
#include <stdio.h>
int main()
{
   float a,b,c;
   printf("Enter three number:\n");
   scanf("%f%f%f",&a,&b,&c);
   if(a > b && a > c){
      printf("The maximum number is: %.2f\n",a);
   }
   else if(b > a && b > c){
      printf("The maximum number is: %.2f\n",b);
```

```
    }
    else{
        printf("The maximum number is: %.2f\n",c);
    }
    return 0;
}
```

22.Write a C program to check whether a number is divisible by 5 and 11 or not.

```
#include<stdio.h>
int main()
{
    int a;
    printf("Please Enter a Number: \n");
    scanf("%d",&a);
    if((a%5==0)&&(a%11==0)){
        printf("The number is divisible by 5 and 11: \n");
    }
    else{
        printf("The number is not divisible by 5 and 11: \n");
    }
    return 0;
}
```

23.Write a C program to check whether a number is even or odd.

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

```
int main()
{
   int a;
   printf("Please Enter a Number: \n");
   scanf("%d",&a);
   if(a % 2 == 0){
      printf("The Number is Even: \n");
   }
   else{
      printf("The Number is Odd: \n");
   }
   return 0;
}
```

24.Write a C program to check whether a year is leap year or not.

```
#include <stdio.h>
int main()
{
   int y;
   printf("Please Enter a Year: \n");
   scanf("%d",&y);
   if((y % 4 == 0) && (y % 100 !=0 ) || (y % 400 == 0)){
      printf("The year is leap year: \n");
   }
   else{
      printf("The year is common year.\n");
   }
```

```
    return 0;
}
```

25.Write a C program to check whether a character is alphabet or not.

```
#include <stdio.h>
int main()
{
    char input;
    scanf("%c",&input);
    if((input >= 'a' && input <= 'z') || (input >= 'A' && input <= 'Z')){
        printf("Alphabet.\n");
    }
    else{
        printf("Not alphabet.\n");
    }
    return 0;

}
```

26.Write a C program to input any alphabet and check whether it is vowel or consonant.

```
#include <stdio.h>
int main()
{
    char ch;
    scanf("%c",&ch);
    if(ch == 'a' || ch == 'e' || ch == 'i' || ch == 'o' || ch == 'u'||ch == 'A' || ch == 'E' || ch == 'I' || ch == 'O'
|| ch == 'U'){
        printf("The Character is Vowel.\n");
```

```
    }
    else{
        printf("Consonant.\n");
    }
    return 0;
}
```

27.Write a C program to input any character and check whether it is alphabet, digit or special character.

```
#include <stdio.h>
int main()
{
    char ch;
    printf("Enter a character: \n");
    scanf("%c",&ch);
    if((ch >= 'a') && (ch <= 'z') || (ch >= 'A') && (ch <= 'Z')){
        printf("Alphabet.\n");
    }
    else if(ch >= '0' && ch <= '9'){
        printf("Digit.\n");
    }
    else{
        printf("Special character.\n");
    }
    return 0;
}
```

28.Write a C program to check whether a character is uppercase or lowercase alphabet.

```
#include <stdio.h>
int main()
{
   char ch;
   printf("Enter Any character:\n");
   scanf("%c",&ch);
   if(ch >= 'a' && ch <= 'z'){
      printf("%c is lowercase.\n",ch);
   }
   else{
      printf("%c is uppercase.\n",ch);
   }
   return 0;
}
```

29.Write a C program to input week number and print week day.

```
#include<stdio.h>
int main()
{
   int n;
   printf("Enter the week number.\n");
   scanf("%d",&n);
   if(n == 1){
      printf("Saturday.\n");
```

```
    }
    else if(n == 2){
        printf("Sunday.\n");
    }
    else if(n == 3){
        printf("Monday.\n");
    }
    else if(n == 4){
        printf("Tuesday.\n");
    }
    else if(n == 5){
        printf("Wednesday.\n");
    }else if(n == 6){
        printf("Thursday.\n");
    }
    else if(n == 7){
        printf("Friday.\n");
    }
    return 0;
}

//30.Write a C program to input month number and print number of days in that month.
#include <stdio.h>
int main()
{
    int n;
    printf("Enter month number.\n");
    scanf("%d",&n);
    if(n == 1 || n == 3 || n == 5 || n == 7 || n == 8 || n == 10 || n == 12){
```

```
        printf("The month is 31 days.\n");
    }
    else if(n == 2){
        printf("The month is 28/29 days.\n");
    }
    else if(n == 2){
        printf("The month is 30 days.\n");
    }
    else if(n == 4 || n == 6 || n == 9 || n == 11){
        printf("The month is 30 days.\n");
    }
    else{
        printf("Something Wrong.\n");
    }
    return 0;
}
```

31.Write a C program to count total number of notes in given amount.

```
#include <stdio.h>
int main()
{
    int a,th,fhu,hu,ft,tw,ten,f,two,one;
    printf("Enter any amount.\n");
    scanf("%d",&a);
    th = a / 1000;
    fhu = (a-(th*1000)) / 500;
    hu = (a-(th*1000)-(fhu*500)) / 100;
    ft = (a-(th*1000)-(fhu*500)-(hu*100)) / 50;
```

```
    tw = (a-(th*1000)-(fhu*500)-(hu*100)-(ft*50)) / 20;
    ten = (a-(th*1000)-(fhu*500)-(hu*100)-(ft*50)-(tw*20)) / 10;
    f = (a-(th*1000)-(fhu*500)-(hu*100)-(ft*50)-(tw*20)-(ten*10)) / 5;
    two = (a-(th*1000)-(fhu*500)-(hu*100)-(ft*50)-(tw*20)-(ten*10)-(f*5)) / 2;
    one = (a-(th*1000)-(fhu*500)-(hu*100)-(ft*50)-(tw*20)-(ten*10)-(f*5)-(two*2)) / 1;
    printf("1000 = %d\n 500 = %d\n 100 = %d\n 50 = %d\n 20 = %d\n 10 = %d\n 5 = %d\n 2 = %d\n 1 =
%d\n",th,fhu,hu,ft,tw,ten,f,two,one);
    return 0;
}
```

32.Write a C program to input angles of a triangle and check whether triangle is valid or not.

```
#include<stdio.h>
int main()
{
    int a,b,c,n;
    printf("Input angle of triangle. \n");
    scanf("%d%d%d",&a,&b,&c);
    n = a + b + c;
    if(n == 180){
        printf("Triangle is valid.\n");
    }
    else{
        printf("The Triangle is invalid.\n");
    }
    return 0;
}
```

33.Write a C program to input all sides of a triangle and check whether triangle is valid or not.

```
#include <stdio.h>
int main()
{
   int a,b,c;
   printf("Input all sides of a triangle.\n");
   scanf("%d%d%d",&a,&b,&c);
   if(a+b>c && a+c>b && c+b>a){
      printf("Triangle is valid.\n");
   }
   else{
      printf("Triangle is invalid.\n");
   }
   return 0;
}
```

34.Write a C program to check whether the triangle is equilateral, isosceles or scalene triangle.

```
#include <stdio.h>
int main()
{
   int a,b,c;
   printf("Input triangle sides.\n");
   scanf("%d%d%d",&a,&b,&c);
   if(a == b && b == c){
      printf("Equilateral triangle.\n");
```

```
    }
    else if(a == b||a == c||b == c){
        printf("Isosceles triangle.\n");
    }
    else{
        printf("Scalene triangle.\n");
    }
}
```