LAB PROGRAMS

```c
#include <stdio.h>
void main()
{
    int a,b,angle;
    printf("enter two angles of a triangle");
    scanf("%d%d",&a,&b);
    angle=180-(a+b);
    printf("a=%d\n b=%d\n angle=%d",a,b,angle);
}
```

```c
#include <stdio.h>
#include <conio.h>
#include <math.h>
int main()
{
    int number;
    int root;
    printf("enter number\n");
    scanf("%d",&number);
    root= sqrt(number);
```

```c
    printf("square root of %d=%d",number,root);

    return 0;

}




#include <stdio.h>

void main()

{

    int a,b,c,d,e,total,average,percentage,outof=150;

    printf("enter the marks of different subjects");

    scanf("%d%d%d%d%d",&a,&b,&c,&d,&e);

    total=a+b+c+d+e;

    average=a+b+c+d+e/5;

    percentage=(total*100)/outof;

    printf("a=%d\n b=%d\n c=%d\n d=%d\n e=%d\n total=%d
average=%d percentage=%d",a,b,c,d,e,total,average,percentage);

}



#include <stdio.h>

#include <math.h>

int main(void)

{

    int x,y;

    float p;
```

```c
    printf("find power of any number\n");
    scanf("%d%d",&x,&y);
    p=pow(x,y);
    printf("%f",p);
    return 0;
}


#include<stdio.h>
main()
{
    int a;
    float b;
    double c;
    char d;
    printf("size of int=%d bytes\n",sizeof(a));
    printf("size of int=%d bytes\n",sizeof(b));
    printf("size of int=%d bytes\n",sizeof(c));
    printf("size of int=%d bytes\n",sizeof(d));
}


#include<stdio.h>
#include<math.h>
void main()
{
```

```c
    float p,r,t,ci;

    printf("enter principal");

    scanf("%f",&p);

    printf("enter rate");

    scanf("%f",&r);

    printf("enter time");

    scanf("%f",&t);

    ci=p*pow((1+r/100),t);

    printf("compound interest%f",ci);

}


#include <stdio.h>

int main()

{

int num1,num2;

scanf("%d%d",&num1,&num2);

if(num1>num2)

{

    printf("%d is greater",num1);

}

else

{

    printf("%d is greater",num2);

}
```

```c
}


#include <stdio.h>

int main()

{

int n1,n2,n3;

scanf("%d%d%d",&n1,&n2,&n3);

if(n1>=n2 && n1>=n3)

{

    printf("%d is greater",n1);

}
else if(n2>=n1 && n2>=n3)

{

    printf("%d is greater",n2);

}
else

{

    printf("%d is the greater number",n3);

}
}


#include <stdio.h>

int main()

{
```

```c
int num;
scanf("%d",&num);
if(num%2==0)
{
    printf("even no.");
}
else
{
    printf("odd no.");
}
}


#include <stdio.h>
int main()
{
int year;
scanf("%d",&year);
if(year%4==0)
{
    printf("leap year.");
}
else
{
    printf("not a leap year.");
```

```
        }
    }



#include<stdio.h>
int main()
{
    char ch;
    printf("enter a character");
    scanf("%c",&ch);
    if(ch>='a' && ch<='z'){
        printf(" alphabet");
    }
    else
    {
        printf(" not a alphabet");
    }
}



#include <stdio.h>
void main()
{
    int days,year,week,day;
    printf("enter days");
    scanf("%d",&days);
```

```c
    year=(days/365);

    week=(days%365)/7;

    day=days-((year*365)+(week*7));

    printf("\n%d",year);

    printf("\n%d",week);

    printf("\n%d",day);

}


#include <stdio.h>

int main()

{

int num;

scanf("%d",&num);

if (num>0)

{

    printf("number is positive");

}

else if (num<0)

{

    printf("number is negative");

}

else

{

    printf("number is zero");
```

```c
        }
}


#include <stdio.h>
int main()
{
int num;
scanf("%d",&num);
if (num%5==0)
{
   printf("number is divisible by 5");
}
else if (num%11==0)
{
   printf("number is divisible by 11");
}
}


#include<stdio.h>
int main()
{
   char ch;
   scanf("%c",&ch);
   if(ch=='a'||ch=='e'||ch=='i'||ch=='o'||ch=='u')
```

```c
    {
        printf("character is vowel");
    }
    else
    {
        printf("character is consonant");
    }
    return 0;
}


#include<stdio.h>
int main()
{
    char ch;
    scanf("%c",&ch);
    if((ch>='a'&&ch<='z')||(ch>='A'&& ch<='Z'))
    {
        printf("%c is alphabet",ch);
    }
    else if(ch>='0'&&ch<='9')
    {
        printf("%c is digit",ch);
    }
    else
```

```c
    {
        printf("%c is special character",ch);
    }
    return 0;
}
```

SWITCH PROGRAMS

```c
#include <stdio.h>
int main()
{
    int ch;
    printf("enter user choice");
    scanf("%d",&ch);
    switch(ch)
    {
        case 1:printf("monday");
            break;
        case 2:printf("tuesday");
            break;
        case 3:printf("wednesday");
            break;
        case 4:printf("thursday");
            break;
```

```c
        case 5:printf("friday");
            break;
        case 6:printf("saturday");
            break;
        case 7:printf("sunday");
            break;
        default: printf("invalid user choice");
    }
    return 0;
}


#include <stdio.h>
int main()
{
    int month;
    printf("enter a month");
    scanf("%d",&month);
    switch(month)
    {
        case 1:printf("31 days in january");
            break;
        case 2:printf("28 days in februray");
            break;
        case 3:printf("31 days in march");
```

```c
            break;
        case 4:printf("30 days in april");
            break;
        case 5:printf("31 days in may");
            break;
        case 6:printf("30 days in june");
            break;
        case 7:printf("31 days in july");
            break;
        case 8:printf("31 days in august");
            break;
        case 9:printf("30 days in september");
            break;
        case 10:printf("31 days in october");
            break;
        case 11:printf("30 days in november");
            break;
        case 12:printf("31 days in december");
            break;
        default: printf("invalid month values");
    }
    return 0;
}
```

```c
#include <stdio.h>
int main()
{
    int num;
    printf("enter the number");
    scanf("%d",&num);
    switch(num%2==0)
    {
        case 0:
        printf("%d is an odd number",num);
        break;
        case 1:
        printf("%d is an even number",num);
        break;
    }
}


#include<stdio.h>
int main()
{
    int a,b;
    printf("enter two number");
    scanf("%d%d",&a,&b);
    switch(a>b)
```

```c
{
    case 0:
    printf("%d is maximum",b);
    break;
    case 1:
     printf("%d is maximum",a);
    break;


}
}
```