/\*A2\_1.c\*/

#include <stdio.h>

int main()

{

int nd,y,nw,w,d;

printf("Enter the number of days:");

scanf("%d",&nd);

y=nd/365;

nw=nd%365;

w=nw/7;

d=nw%7;

printf(" number of years:%d\n",y);

printf(" number of weeks:%d\n",w);

printf(" number of days:%d\n",d);

return 0;

}

/\*A2\_2.c\*/

#include <stdio.h>

#include <math.h>

int main()

{

float p,t,R,r,si1,si,ci1,ci;

printf("Enter the Principle:");

scanf("%f",&p);

printf("Enter the Time:");

scanf("%f",&t);

printf("Enter the Rate:");

scanf("%f",&R);

r=R/100;

si=p\*r\*t;

printf("Simple Intrest:%f\n",si);

ci1=p\*r;

ci=pow(ci1,t);

printf("Compound Intrest:%f",ci);

return 0;

}

/\*A2\_3a.c\*/

#include <stdio.h>

int main()

{

int n;

printf("Enter the number:");

scanf("%d",&n);

printf("%d X 1 :%d \n",n,n\*1);

printf("%d X 2 :%d \n",n,n\*2);

printf("%d X 3 :%d \n",n,n\*3);

printf("%d X 4 :%d \n",n,n\*4);

printf("%d X 5 :%d \n",n,n\*5);

printf("%d X 6 :%d \n",n,n\*6);

printf("%d X 7 :%d \n",n,n\*7);

printf("%d X 8 :%d \n",n,n\*8);

printf("%d X 9 :%d \n",n,n\*9);

printf("%d X 10 :%d \n",n,n\*10);

return 0;

}

/\*A2\_3b.c\*/

#include <stdio.h>

int main()

{

int a,b,c;

printf("Enter the number1:");

scanf("%d",&a);

printf("Enter the number2:");

scanf("%d",&b);

a=a+b;

b=a-b;

a=a-b;

printf("After 1st swapping \n number1=%d and number2=%d:\n",a,b);

c=a+b;

a=c-a;

b=c-b;

printf("After 2nd swapping \n number1=%d and number2=%d:",a,b);

return 0;

}

/\*A2\_4.c\*/

#include <stdio.h>

#include <math.h>

int main()

{

int x1,x2,x3,y1,y2,y3,p1,p2;

float t,Ar1,Ar2,Ar3;

printf("Enter the Coordinate of point 1:");

scanf("%d%d",&x1,&y1);

printf("Enter the Coordinate of point 2:");

scanf("%d%d",&x2,&y2);

printf("Enter the Coordinate of point 3:");

scanf("%d%d",&x3,&y3);

printf("Enter the Coordinate of point p:");

scanf("%d%d",&p1,&p2);

t=abs((x1\*(y2-y3))+(x2\*(y3-y1))+(x3\*(y1-y2)))/2;

Ar1=abs((p1\*(y2-y3))+(x2\*(y3-p2))+(x3\*(p2-y2)))/2;

Ar2=abs((x1\*(p2-y3))+(p1\*(y3-y1))+(x3\*(y1-p2)))/2;

Ar3=abs((x1\*(y2-p2))+(x2\*(p2-y1))+(p1\*(y1-y2)))/2;

if(t==Ar1+Ar2+Ar3)

printf("Point lies inside Triangle");

else

printf("Point lies inside Triangle");

return 0;

}

/\*A2\_5a.c\*/

#include <stdio.h>

int main()

{

int a,b,c;

printf("Enter the number of non parallel lines:");

scanf("%d",&a);

b=a\*(a+1);

c=b/2 + 1;

printf("The maximum number of Regions in which plane gets divided :%d",c);

return 0;

}

/\*A2\_5b.c\*/

#include <stdio.h>

int main()

{

int a,b,c,d;

printf("Enter the number of squares of all size in a chess board:");

scanf("%d",&a);

b=2\*a + 1;

c=a+1;

d=a\*b\*c/6;

printf("Total Squares:%d",d);

return 0;

}