Assignment no 3

1. #include<stdio.h>

int main(){

int n;

printf("Enter any number : ");

scanf("%d",&n);

printf(n>0?"The number is positive":"The number is non-positive");

return 0;

}

2. #include<stdio.h>

int main(){

int n;

printf("Enter any number : ");

scanf("%d",&n);

printf(n%5==0?"The number is divisible by five":"The number is not divisible by five");

return 0;

}

3. #include<stdio.h>

int main(){

int n;

printf("Enter any number : ");

scanf("%d",&n);

printf(n%2==0?"The given number is even":"The given number is odd");

return 0;

}

4. #include<stdio.h>

int main(){

int n;

printf("Enter any number : ");

scanf("%d",&n);

if((n/2\*2)==n){

printf("The number is even");

}

else{

printf("The number is odd");

}

return 0;

}

5. #include<stdio.h>

int main(){

int n;

printf("Enter any number : ");

scanf("%d",&n);

n=n/100;

printf((n>0)&&(n<10)?"It's a three digit number":"It's not a three digit number");

return 0;

}

6. #include<stdio.h>

int main(){

int n1,n2;

printf("Enter any two numbers : ");

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

if(n1==n2){

printf("%d",n1);

}

else{

n1>n2?printf("%d",n1):printf("%d",n2);

}

return 0;

}

7. #include<stdio.h>

int main(){

int a,b,c,D;

printf("Enter the value of a : ");

scanf("%d",&a);

printf("Enter the value of b : ");

scanf("%d",&b);

printf("Enter the value of c : ");

scanf("%d",&c);

D=b\*b-4\*a\*c;

if(D>0){

if(a==0){

printf("Not a quadriatic equation");

}

else{

printf("The nature of roots are real and distincts");

}

}

if(D==0){

printf("The nature of roots are real and equal");

}

if(D<0){

printf("The nature of the roots are imaginary");

}

return 0;

}

8. #include<stdio.h>

int main(){

int y;

printf("Enter the year : ");

scanf("%d",&y);

if((y%4==0)&&(y%100!=0)){

printf("The year is leap year");

}

else{

printf("The year is not a leap year");

}

return 0;

}

9. #include<stdio.h>

int main(){

int n1,n2,n3;

printf("Enter any three numbers : ");

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

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

printf("%d",n1);

}

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

printf("%d",n2);

}

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

printf("%d",n3);

}

return 0;

}

10. #include<stdio.h>

int main(){

float cp,sp,p,l,profit\_percentage,loss\_percentage;

printf("Enter the cost price of the product : ");

scanf("%d",&cp);

printf("Enter the selling price of the product : ");

scanf("%d",&sp);

if(cp>sp){

l=cp-sp;

loss\_percentage = (l/cp)\*100;

printf("loss percentage is %f\n",loss\_percentage);

}

if(sp>cp){

p=sp-cp;

profit\_percentage = (p/cp)\*100;

printf("profit percentage is %f\n",profit\_percentage);

}

return 0;

}

11. #include<stdio.h>

int main(){

int m1,m2,m3,m4,m5;

printf("Enter the marks of 5 subjects max marks 100 : ");

scanf("%d %d %d %d %d",&m1,&m2,&m3,&m4,&m5);

if(m1>32&&m2>32&&m3>32&&m4>32&&m5>32){

printf("Candidate has passed in all the examination");

}

else if(m1<32&&m2<33&&m3<33&&m4<33&&m5<33){

printf("Candidate has failed in all the examination");

}

else{

printf(m1<32?"candidate has failed in the first exam\n":"Candidate has passed in the first exam\n");

printf(m2<32?"candidate has failed in the second exam\n":"Candidate has passed in the second exam\n");

printf(m3<32?"candidate has failed in the Third exam\n":"Candidate has passed in the Third exam\n");

printf(m4<32?"candidate has failed in the fourth exam\n":"Candidate has passed in the fourth exam\n");

printf(m5<32?"candidate has failed in the fifth exam\n":"Candidate has passed in the fifth exam\n");

}

return 0;

}

12. #include<stdio.h>

int main(){

char a;

printf("Enter any alphabet : ");

scanf("%c",&a);

if(a>='a'&&a<='z'){

printf("The entered alphabet is in lowercase");

}

else if(a>='A'&&a<='Z'){

printf("The entered alphabet is in uppercase");

}

else{

printf("You have not entered an alphabet");

}

}

13. #include<stdio.h>

int main(){

int n;

printf("Enter any number : ");

scanf("%d",&n);

if(n%6){

printf("The number is not divisible by 3 and 2 ");

}

else{

printf("The number is divisible by 3 and 2");

}

return 0;

}

14. #include<stdio.h>

int main(){

int n;

printf("Enter any number : ");

scanf("%d",&n);

if(n%21==0){

printf("The number is divisible by both 7 and 3");

}

else if(n%7==0||n%3==0){

printf("the number is divisible by either 7 or 3");

}

else{

printf("The number is not divisible by both 7 and 3");

}

return 0;

}

15. #include<stdio.h>

int main(){

int n;

printf("Enter any number : ");

scanf("%d",&n);

if(n>0){

printf("The number is positive");

}

else if(n<0){

printf("The number is negative");

}

else{

printf("The number is zero");

}

return 0;

}

16. #include<stdio.h>

int main(){

char c;

printf("Enter any character : ");

scanf("%c",&c);

if(c>='A'&&c<='Z')

printf("The entered character is an uppercase");

else if(c>='a'&&c<='z')

printf("The entered character is an lowercase");

else

printf("The entered character is a special character or digit");

return 0;

}

17. #include<stdio.h>

int main(){

int a,b,c;

printf("Enter the length of the sides of the triangle : ");

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

if((a+b>c)&&(a+c>b)&&(c+b>a)){

printf("the triangle is valid");

}

else{

printf("The triangle is not valid");

}

return 0;

}

18. #include<stdio.h>

int main(){

int m;

printf("Enter the month in number : ");

scanf("%d",&m);

if(m<8&&m%2!=0)

printf("The number of days in this month is : 31");

if(m%2==0&&m>7)

printf("The number of days in this month is : 31");

if((m%2==0)&&(m>3&&m<7))

printf("The number of days in this month is : 30");

if(m%2!=0&&m>8)

printf("The number of days in this month is : 30");

if(m==2)

printf("The number of days in this month is : 29 if its a leap year and 28 if it's not a leap year");

return 0;

}