Assignment-6: More on Decision Control Statements

1. Write a program to check whether a given number is a three digit number or not.

2. Write a program which takes the cost price and selling price of a product from the user. Now calculate and print profit or loss percentage.

3. Write a program to take marks of 5 subjects from the user. Assume marks are given out of 100 and passing marks is 33. Now display whether the candidate passed the examination or failed.

4. Write a program to check whether a given alphabet is in uppercase or lowercase.

5. Write a program to check whether a given number is divisible by 3 and divisible by

2.

6. Write a program to check whether a given number is divisible by 7 or divisible by 3.

7. Write a program to check whether a given number is positive, negative or zero.

8. Write a program to check whether a given character is an alphabet (uppercase), an alphabet (lower case), a digit or a special character.

9. Write a program which takes the length of the sides of a triangle as an input.

Display whether the triangle is valid or not.

10. Write a program which takes the month number as an input and display number of days in that month.

1

#include<stdio.h>

int main(){

int n;

printf("Enter any no.");

scanf("%d",&n);

if(n>=100&&n<=999)

printf("%d is a three digit no.",n);

else

printf("%d is not a three digit no.",n);

}

2

#include<stdio.h>

int main(){

float cp,sp;

float profit,loss;

printf("Enter cost price.");

scanf("%f",&cp);

printf("Enter selling price.");

scanf("%f",&sp);

if(sp-cp>=0){

profit=(sp-cp)/cp\*100;

printf("Profit is %.2f",profit);

}

else {

loss=(cp-sp)/cp\*100;

printf("Loss is %.2f",loss);

}

}

3

#include<stdio.h>

int main(){

float s1,s2,s3,s4,s5;

float per;

printf("Enter the 5 subject No.");

scanf("%f %f %f %f %f",&s1,&s2,&s3,&s4,&s5);

per=(s1+s2+s3+s4+s5)/5;

if(per>=33)

printf("Candidate passed the examination %.2f%%",per);

else

printf("candidate failed the examination %.2f%%",per);

}

4

#include<stdio.h>

int main(){

char x;

printf("Enter Alphabet: ");

scanf("%c",&x);

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

printf("Alphabet is Lowercase %c ",x);

else if (x>='A' && x<='Z')

printf("Alphabet is Uppercase %c",x);

else

printf("%c is Not alphabet.",x);

}

5

#include<stdio.h>

int main(){

int n;

printf("Enter the any no.");

scanf("%d",&n);

if(n%3==0 && n%2==0)

printf("%d is divisible by 3 and 2 ",n);

else

printf("%d is Not divisible by 3 and 2 ",n);

}

6

#include<stdio.h>

int main(){

int n;

printf("Enter any no.");

scanf("%d",&n);

printf("\n");

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

printf(" %d is divisible by 7 or divisible by 3",n);

else

printf(" %d is not divisible by 7 or not divisible by 3",n);

}

7

#include<stdio.h>

int main(){

int n;

printf("Enter any no.");

scanf("%d",&n);

if(n>0)

printf("%d is a positive no.",n);

else if(n<0)

printf("%d is a negative no.",n);

else

printf("%d is a zero",n);

}

8

#include<stdio.h>

int main(){

char ch;

printf("Enter any character: ");

scanf("%c",&ch);

printf("\n");

if(ch>=65 && ch<=90)

printf("%c is an alphabet (uppercase)",ch);

else if(ch>=97 && ch<=122)

printf("%c is alphabet(lowecase)",ch);

else if(ch>=32 && ch<=47 ||ch>=58 && ch<=64 ||ch>=91 && ch<=96 || ch>=123 && ch<=126)

printf("%c is special character",ch);

else if(ch>=48 && ch<=57)

printf("%c is digit",ch);

else

printf("%c is other character",ch);

}

9

#include<stdio.h>

int main(){

int a,b,c;

printf("Enter the length of triangle side a: ");

scanf("%d",&a);

printf("Enter the length of triangle side b: ");

scanf("%d",&b);

printf("Enter the length of triangl side c: ");

scanf("%d",&c);

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

printf("Triangle is Valid");

else

printf("Triangle is not valid");

}

10

#include<stdio.h>

int main(){

int m;

printf("Enter the month no.");

scanf("%d",&m);

printf("\n");

if(m==1 || m==3 || m==5 || m==7 || m==8 || m==10 || m==12)

printf(" In month total days is 31");

else if(m==4||m==6||m==9||m==11)

printf("In month total days is 30");

else if (m==2)

printf("In month total days is 28 or 29");

else

printf("Invalid month number");

}