**2. Simple numeric problems**

**a. Write a program for find the max and min from the three numbers.**

#include<stdio.h>

void main(){

int a,b,c;

printf("Enter 3 numbers");

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

if(a>b && a>c)

printf("\n Maximum number is a = %d", a);

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

printf("\n Maximum number is b = %d", b);

else

printf("\n Maximum number is c = %d", c);

if(a<b && a<c)

printf("\n Minimum number is a = %d", a);

else if(b<a && b<c)

printf("\n Minimum number is b = %d", b);

else

printf("\n Minimum number is c = %d", c);

}

**Output**

**b. Write the program for the simple, compound interest.**

#include<stdio.h>

#include<math.h>

int main()

{

float p,q,r,SI,CI;

int t;

printf("Enter the value of Principal p = ");

scanf("%f",&p);

printf("Enter the value of Rate r = ");

scanf("%f",&r);

printf("Enter the value of Period in year t = ");

scanf("%d",&t);

SI = ((p\*t\*r)/100);

printf("Simple Interest SI=%f \n",SI);

q = 1+(r/100);

CI=p\*pow(q,t)-p;

printf("Compound Interest CI=%f \n",CI);

return 0;

}

**Output**

**c. Write program that declares Class awarded for a given percentage of marks, where mark <40%=Failed, 40% to 60%=second class, 60%to 70%= First class,>=70% = Distinction. Read percentage from standard input.**

#include <stdio.h>

main()

{

int num;

printf("Enter your percentage ");

scanf("%d",&num);

printf("\n You entered %d", num); // printing outputs

if(num >= 70)

{

printf("\n You got Distinction"); // printing outputs

}

else if ( num >=60 && num<=70) // Note the space between else & if

{

printf("\n You got First Class");

}

else if ( num >=40 &&num<=60){

printf(" \nYou got Second class ");

}

else if ( num < 40){

printf(" \n You Failed in this exam");

}

return 0;

}

**Output**

**d. Write a program that prints a multiplication table for a given number and the number of rows in the table. For example, for a number 5 and rows = 3, the output should be:**

**5 x 1 = 5**

**5 x 2 = 10**

**5 x 3 = 15**

#include <stdio.h>

main()

{

int n, i, row;

printf("Enter an integer: ");

scanf("%d",&n);

printf("Enter no of rows: ");

scanf("%d",&row);

for(i=1; i<=row; ++i)

{

printf("%d \* %d = %d \n", n, i, n\*i);

}

}

**Output**

**e. Write a program that shows the binary equivalent of a given positive number between 0 to 255.**

#include <stdio.h>

main()

{

int n;

printf("enter n ");

scanf("%d",&n);

// array to store binary number

int binaryNum[1000];

// counter for binary array

int i = 0;

while (n > 0)

{

// storing remainder in binary array

binaryNum[i] = n % 2;

n = n / 2;

i++;

}

// printing binary array in reverse order

for (int j = i - 1; j >= 0; j--)

printf("%d",binaryNum[j]);

}

**Output**