UR CST   on15/11/2023

RUYANGA Merci   223007985

ASSIGMENT OF C-PROGRAMMING LANGUAGE

1. <u>solutions</u>

```c
#include<stdio.h>

int main(){

    float marks[5],sum=0,totalmarks=500,percent;

    int i;

    printf("please enter your marks of five subjects\n");

    for (i=0;i<=4;i++){

        scanf("%f",&marks[i]);

        sum=sum+marks[i];

    }

    percent=(sum*100)/totalmarks;

    printf("percentage is:%.2f\n",percent);

    if (percent>=90 && percent<100){

        printf("Grade A");

    }else{

        if(percent>=80 && percent<90){

            printf("Grade B");

        }else{
```

```c
        if(percent>=70 && percent<80){

            printf("Grade C");

        }else{

            if(percent>=60 && percent<70){

                printf("Grade D");

            }else{

                if(percent>=50 && percent<60){

                    printf("Grade E");

                }else{

                    if(percent<50){

                        printf("Grade F");

                    }else{

                        if(percent<0 && percent>100){

                            printf("is out of decision");

                        }

                    }

                }

            }

        }

    }

}
    return 0;

}
```

2. <u>solutions</u>

```c
#include<stdio.h>

int main(){

    int year;

    printf("please enter year:\n");

    scanf("%d",&year);

    if (year%400==0 && year%100==0 && year%4==0){

        printf("this year is leap");

    }else{

        printf("this year is not leap");

    }

    return 0;

}
```

3.(a).solutions

```c
#include<stdio.h>

int main(){

    int a,b,c;//declaration of variable

    printf("Input the initial value of a=\n");

    scanf("%d",&a);

    printf("Input the initial value of b=\n");

    scanf("%d",&b);

    printf("Input the initial value of c=\n ");

    scanf("%d",&c);

    printf("The updated value of a=%d\n",++a);//updated value a

    printf("The updated value of b=%d\n",++b);//updated value b

    printf("The updated value of c=%d\n",++c);//updeted value c

    return 0;

}
```

3.(b).solutions

```c
#include<stdio.h>
int main(){

    int a,b,c;//declaration of variable

    printf("Input the initial value of a=\n");

    scanf("%d",&a);

    printf("Input the initial value of b=\n");
```

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

printf("Input the initial value of c=\n ");

scanf("%d",&c);

printf("                \n");//empty soace

printf("The orginal value of a=%d\n",a);

printf("The orginal value of b=%d\n",b);

printf("The orginal value of c=%d\n",c);

printf("                \n");//empty space

printf("The updated value of a=%d\n",++a);//updated value a

printf("The updated value of b=%d\n",++b);//updated value b

printf("The updated value of c=%d\n",++c);//updeted value c



    return 0;
}
```

4.(a). solutions

#include<stdio.h>

int main(){

       int number1,number2;//declaration of variables

       printf("Enter the first number\n");// number1=4

       scanf("%d",&number1);

       printf("Enter the second number\n");//number2=6

       scanf("%d",&number2);

       if(number1>number2){//if condition 1

              printf("The value of a/b=%d\n",number1/number2);

       }

       else{//oterwise

              printf("The value of a*b=%d\n",number1*number2);//the output is: The value of
a*b=24

       }

       return 0;

}

4.(b).solutions

```c
int main(){

    int a,b,c;

    printf("Enter the value of the first number\n");//a=4

    scanf("%d",&a);

    printf("Enter the value of the second number\n");//b=5

    scanf("%d",&b);

    printf("Enter the value of the third number\n");//c=7

    scanf("%d",&c);

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

       printf("a is greatest:%d",a);

    }else{

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

          printf("b is greatest:%d",b);

       }else{

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

             printf("c is greatest:%d",c);

          }else{

             printf("all numbers are equql");

          }

       }

    }

return 0;

}
```