practicle file

Of

Programming in c

Course CSEG1041

School of computer science

Submitted by

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Course: BCA

Semester:1st

BATCH:5

SUBMITTED to

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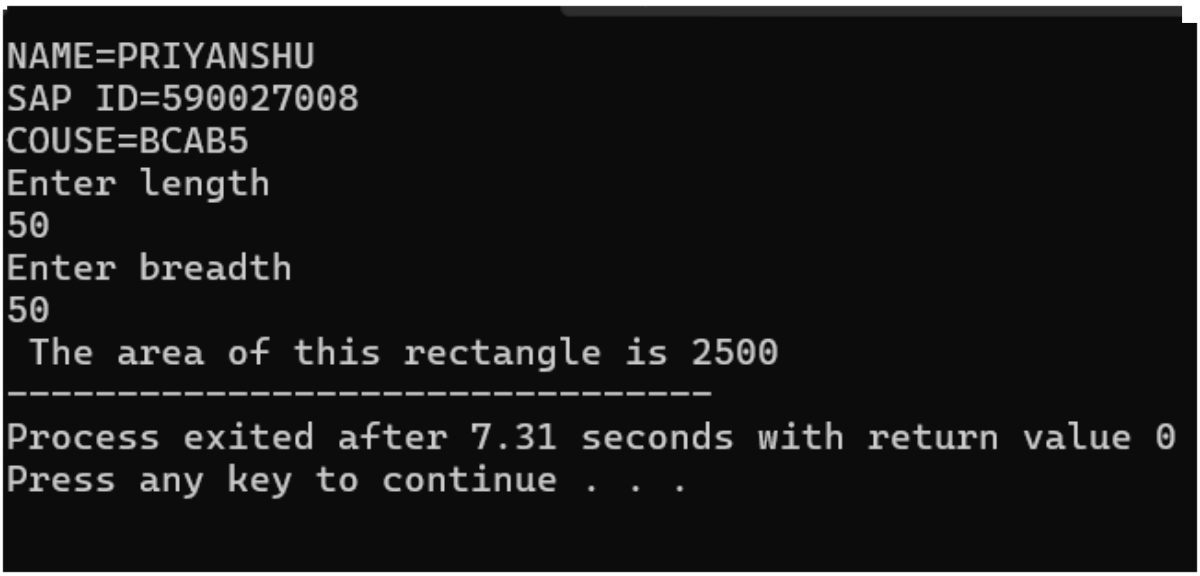
1. WAP a C program to calculate the area and perimeter of a rectangle

based on its length and width.

Solution1=

```
 #include <stdio.h>
int main() {
//int length =50;
//int breadth =50;
printf("NAME=PRIYANSHU\nSAP ID=590027008\nCOUSE=BCAB5\n");
int length,breadth;
printf ("Enter length\n");
scanf("%d",&length);
printf ("Enter breadth\n");
scanf("%d",&breadth);
printf(" The area of this rectangle is %d ", length*breadth);
return 0;
}
```



2. a C program to Convert temperature from Celsius to Fahrenheit using the formula: F = (C * 9/5) + 32

Solution 2=

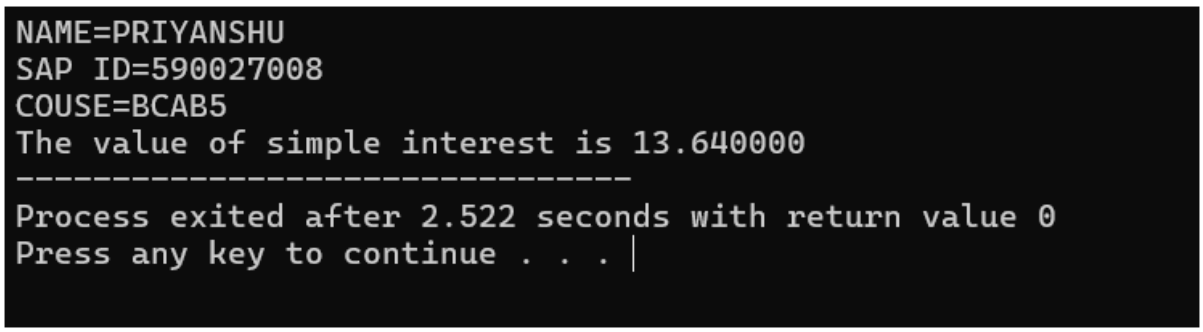
```
#include <stdio.h>
int main(){
printf("NAME=PRIYANSHU\nSAP ID=590027008\nCOUSE=BCAB5\n");
float c=37.0,f;
   f=((9/5)*c) +32;
   printf("The value in fahrenheit is %f",f);
   return 0;
}
```

```
NAME=PRIYANSHU
SAP ID=590027008
COUSE=BCAB5
The value in fahrenheit is 69.000000
--------------------------------
Process exited after 2.099 seconds with return value 0
Press any key to continue . . .
```

3.Write a program to calculate Compound Interest.

Solution 3=

```
#include <stdio.h>
int main() {
printf("NAME=PRIYANSHU\nSAP ID=590027008\nCOUSE=BCAB5\n");
    float p= 34.1;
    int r= 8;
    int t =5;
   printf("The value of simple interest is %f ", (p*r*t) /100);
    return 0;
}
```



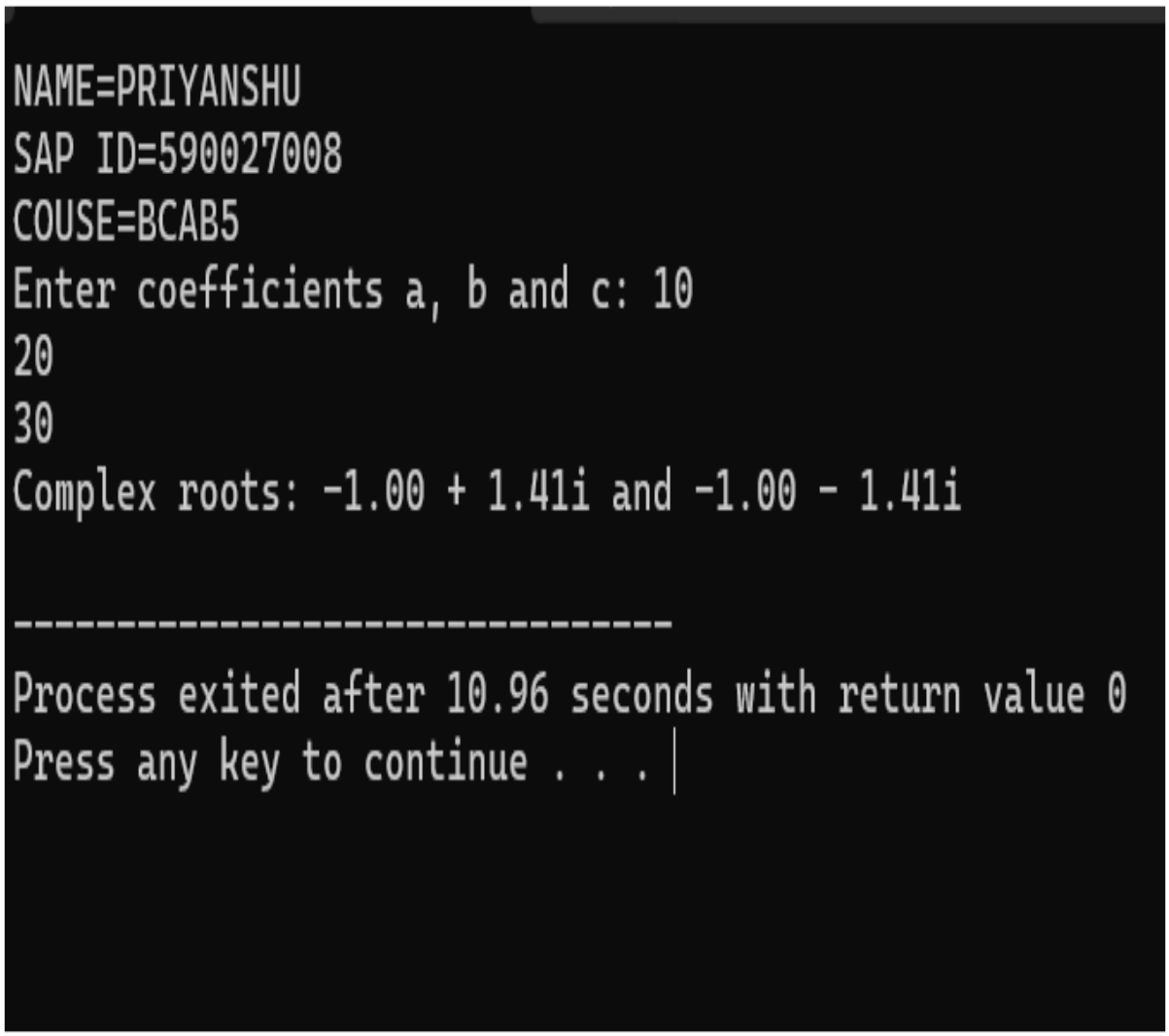
4. Write a program to find the roots of the quadratic equations.

Solution 4=

```
#include <stdio.h>
#include <math.h>

int main() {
printf("NAME=PRIYANSHU\nSAP ID=590027008\nCOUSE=BCAB5\n");
    float a, b, c, discriminant, root1, root2;
    // Input coefficients
    printf("Enter coefficients a, b and c: ");
    scanf("%f %f %f", &a, &b, &c);
```

```
    discriminant = b*b -  4*a*c;


    if (discriminant > 0) {
        root1 = (- b + sqrt(discriminant)) /
(2*a);
        root2 = (- b -  sqrt(discriminant)) /
(2*a);
        printf("Real and distinct roots: %.2f
and %.2f\n", root1, root2);
    }
    else if (discriminant == 0) {
        root1 = - b / (2*a);
        printf("Real and equal roots: %.2f
and %.2f\n", root1, root1);
    }
    else {
        float realPart = - b / (2*a);
        float imagPart = sqrt(-
```

```
discriminant) / (2*a);
        printf("Complex roots: %.2f + %.2fi
and %.2f -  %.2fi\n",
                realPart, imagPart, realPart,
imagPart);
    }


    return 0;
}
```


NAME=PRIYANSHU
SAP ID=590027008
COUSE=BCAB5
Enter coefficients a, b and c: 10
20
30
Complex roots: -1.00 + 1.41i and -1.00 - 1.41i
Process exited after 10.96 seconds with return value 0
Press any key to continue . . .