ASSIGNMENT-3

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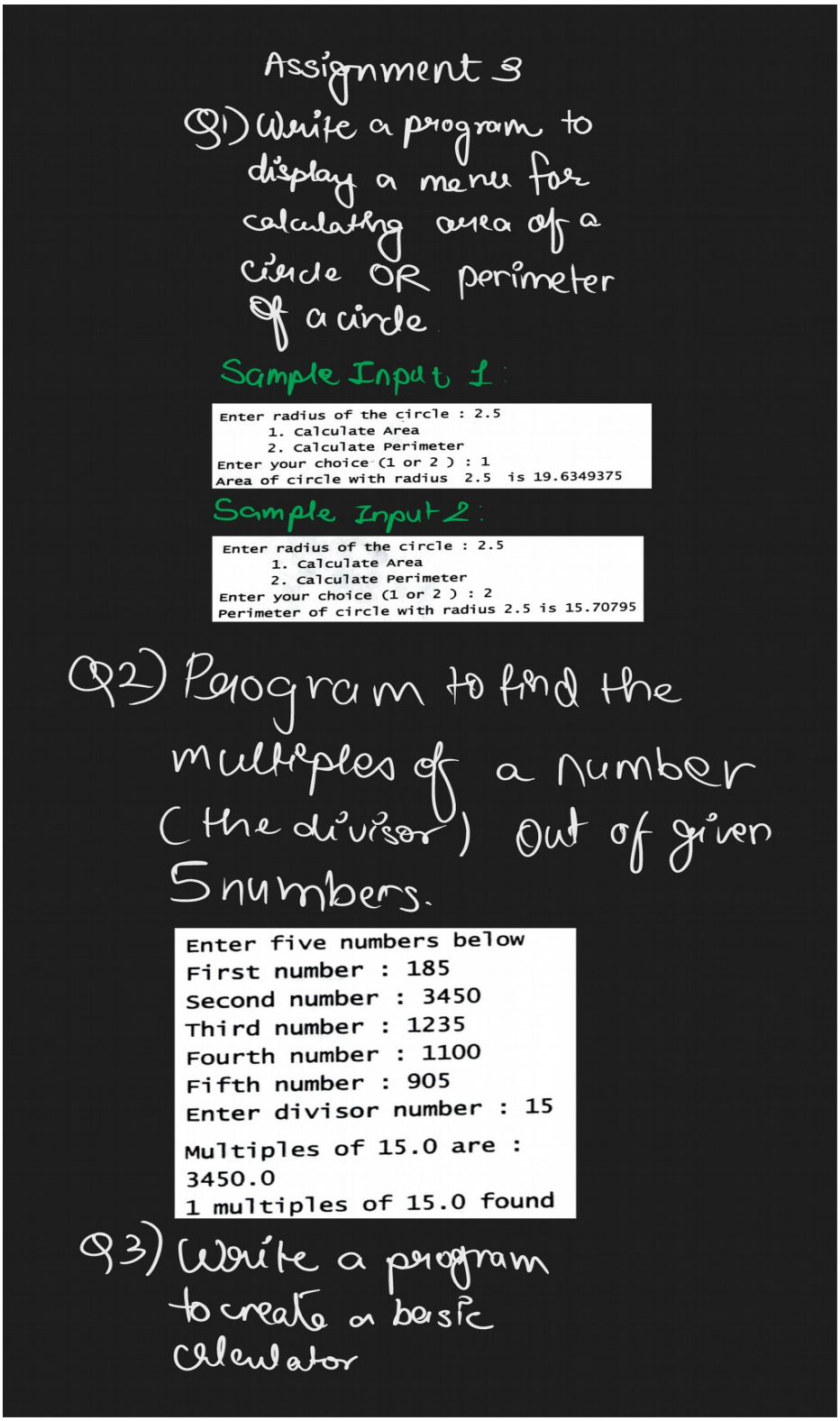
Q)



Q1)

CODE:

```
import math
a=float(input("Enter radius of the circle:"))
print("1.Calculate Area")
print("2.Calculate perimeter")
b=int(input("Enter your choice (1 or 2):"))
if(b==1):
      area=math.pi*a*a
      print("Area of circle with radius {} is area {} ".format(a,area))
if(b==2):
      perimeter=2*math.pi*a
      print("Perimeter of circle with radius {} is area
      {}".format(a,perimeter))
```

Sample output:

```
Enter radius of the circle:2.5
1.Calculate Area
2.Calculate perimeter
Enter your choice (1 or 2):2
Perimeter of circle with radius 2.5 is area 15.707963267948966
```

Q2)

CODE:

```
print("Enter five numbers below")

n1=float(input("First number:"))
n2=float(input("Second number:"))
n3=float(input("Third number:"))
n4=float(input("Fourth number:"))
n5=float(input("Fifth number:"))
div=int(input("Enter divisor number:"))
count=0
s=""
if(n1%div==0):
      s=s+(str)(n1)+" "
      count=count+1
if(n2%div==0):
      s=s+(str)(n2)+" "
      count=count+1
```

```
if(n3%div==0):
      s=s+(str)(n3)+" "
      count=count+1
if(n4%div==0):
      s=s+(str)(n4)+" "
      count=count+1
if(n5%div==0):
      s=s+(str)(n5)+" "
      count=count+1
print("Multiple of {} are:{}".format(float(div),s))
print("{} multiples of {} are found".format(count,float(div)))
```

Sample output:

1)

```
Enter five numbers below

First number:5
Second number:10
Third number:15
Fourth number:21
Fifth number:20
Enter divisor number:5
Multiple of 5.0 are:5.0 10.0 15.0 20.0
4 multiples of 5.0 are found
```

2)

```
Enter five numbers below

First number:185
Second number:3450
Third number:1100
Fourth number:1235
Fifth number:905
Enter divisor number:15
Multiple of 15.0 are:3450.0
1 multiples of 15.0 are found
```

Q3)

Code:

```
import math

print("1.Addition\n2.Substraction\n3.Multiplication\n4.Division\n5.Power\
n6.Absolute value\n")
a=int(input("Select an option from 1 to 6:"))
if(a==1):
      n1=float(input("Enter number1:"))
      n2=float(input("Enter number2:"))
      print(n1+n2)
if(a==2):
      n1=float(input("Enter number1:"))
      n2=float(input("Enter number2:"))
      print(n1-n2)
if(a==3):
      n1=float(input("Enter number1:"))
      n2=float(input("Enter number2:"))
      print(n1*n2)
if(a==4):
      n1=float(input("Enter number1:"))
      n2=float(input("Enter number2:"))
      print(n1/n2)
if(a==5):
      n1=float(input("Enter base value:"))
      n2=float(input("Enter exponent values:"))
      print(n1**n2)
if(a==6):
      n1=float(input("Enter any number:"))
      print(abs(n1))
```

Sample output:

1)

```
1.Addition
2.Substraction
3.Multiplication
4.Division
5.Power
6.Absolute value

Select an option from 1 to 6:1
Enter number1:12
Enter number2:12
24.0
```

2)
```
1.Addition

2.Substraction
3.Multiplication
4.Division
5.Power
6.Absolute value

Select an option from 1 to 6:2
Enter number1:12
Enter number2:9
3.0
```

3)
```
1.Addition

2.Substraction
3.Multiplication
4.Division
5.Power
6.Absolute value

Select an option from 1 to 6:6
Enter any number:-12
12.0
```