

MECE 101 MIDTERM

Name:

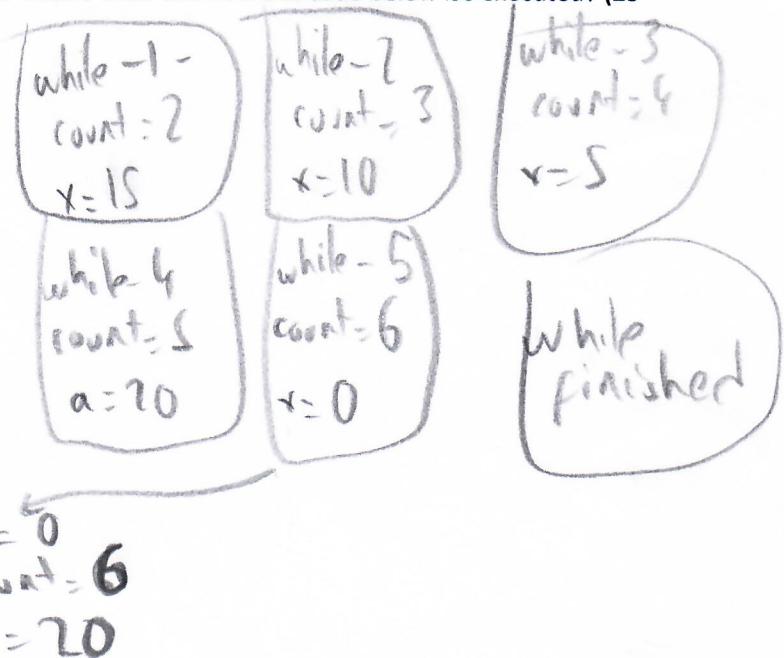
Surname:

Number:

Cengizhan

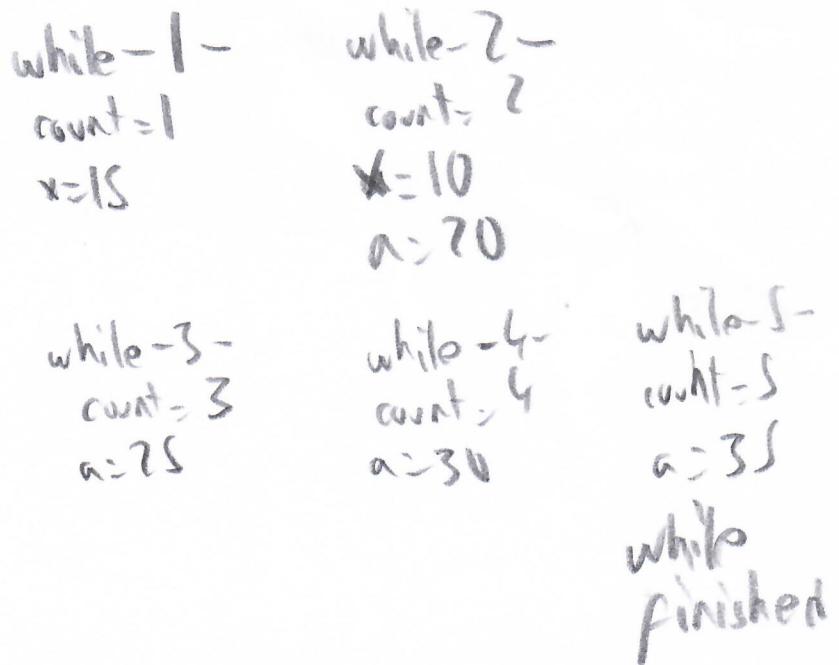
Q1) What will be the value of 'a', 'x' and 'count' after the MATLAB code below is executed? (25 points)

```
x=20;
a=25;
count=1;
while x>=5 & a>=10,
    count=count+1;
    if mod(a,count)==0,
        a=a-5;
    else
        x=x-5;
    end
end
```



Q2) What will be the value of 'a', 'x' and 'count' after the MATLAB code below is executed? (25 points)

```
x=20;
a=15;
count=0;
while x>=5 & a<=30,
    count=count+1;
    if x>a
        x=x-5;
    elseif x<a
        a=a+5;
    else
        x=x-5;
        a=a+5;
    end
end
```



a=35
count=5
x=10

Q3) What will be the value of 'k' after the MATLAB code below is executed? (15 points)

```
x=[1 2 3]
y=[1 1 3]
if x==y
    k=1;
else
    k=0;
end
```

$$k=0$$

Q4) What will be the value of 'k' after the MATLAB code below is executed? (15 points)

```
x=[1 2 3]
y=[1 1 3]
if x(1)==y(1) & x(3)==y(3),
    k=1;
else
    k=0;
end
```

$$k=1$$

Q5) What will be the value of 'count' after the MATLAB code below is executed? (20 points)

```
count=0;
for i=1:10,
    count=count+i;
end
```

$$\text{count} = 55$$