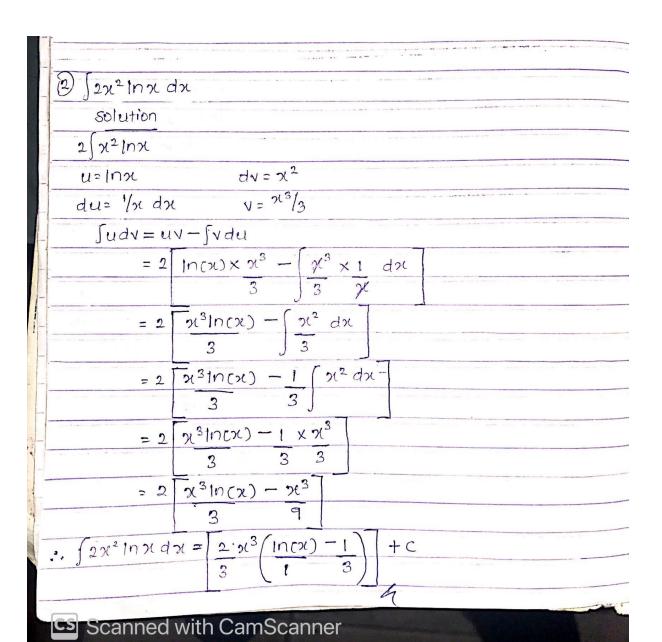
NAME: ALEGBELEYE OLUWATOSIN OLUWAPELUMI

DEPARTMENT: COMPUTER SCIENCE

MATRIC NO: 19/SCI01/015

**ASSIGNMENT** 

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NAME! ALEGBELEYE DLUWATOSIN DLUWAPELUMI
DEPARTMENT: COMPUTER SCIENCE
MATRIC NUMBER: 19/5c101/015
  ASSIGNMENT
1) lessing dx
   Solution
U= 5inx
du= cosx dx v= ex
   Judy = uv-Jvau
         = (sinn)(en) - Jen Eusn dn
         = exsinx - Sexcosx dx
  Jencosn da
U= CUSX
du= -sinx dx
    Sudv = uv-Svdu
          = excosx-Jex(-sinx dx)
           = excosx + Jex sinx dx
  Jensinx dx = ensinx - [encosx + Jensinx dx
  Jex sinx dx = exsinx -excosx - Jex sinx dx
   Let Sensinx dx = I
     I = e^{\pi} \sin \pi - e^{\pi} \cos \pi - I
     I + I = ex sinx - ex cosx
      PI = exsinx -excusx
       I = e^{\alpha} \sin \alpha - e^{\alpha} \cos \alpha
   \int e^{x} \sin x \, dx = e^{x} \sin x - e^{x} \cos x + e^{x}
   \int e^{x} \sin x \, dx = \frac{1}{2} \left[ e^{x} \sin x - e^{x} \cos x \right] + c
Scanned with CamScanner
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3 /22510x dx	lar, a series de designa
Solution	
$u=x^2$ $dv=\sin x$	
$du = 2x dx \qquad V = -\cos x$	ting the second
- Sudv = uv-Svdu	
$= n^2(-\cos n) - \int (-\cos n) \times 2n  dn$	
$= -x^2 \cos x + \int 2x \cos x  dx$	
2xcosx dx	
- U= 2x dv= COSX	Participation of the Participa
du=2 dx V=81nx	
- Judy = uy - Jydu	
$= 2\pi \sin \pi - \int \sin \pi \times 2  d\pi$	Control of the second
= 2×sin× -2∫sin× dx	
= 2xsinx -2 (-cosx)	
= 2×51n71 +2 CUS71	
$\therefore \int x^2 \sin x  dx = -x^2 \cos x + 2x \sin x + 2 \cos x + C$	
$\therefore \int x^2 \sin x  dx = -x^2 \cos x + 2x \sin x + 2 \cos x + C$	
$\therefore \int x^2 \sin x  dx = -x^2 \cos x + 2x \sin x + 2 \cos x + C$	
$\therefore \int x^2 \sin x  dx = -x^2 \cos x + 2x \sin x + 2 \cos x + C$ $= -x^2 \cos x + 2x \sin x + 2 \cos x + C$ $= -x^2 \cos x + 2x \sin x + 2 \cos x + C$ $= -x^2 \cos x + 2x \sin x + 2 \cos x + C$ $= -x^2 \cos x + 2x \sin x + 2 \cos x + C$	
- A Sx cosx dx	
- A) Sx cosx dx Solution	
$-4) \int x \cos x  dx$ $- Solution$ $- u = x \qquad dv = \cos x$ $- du = 1  dx \qquad v = \sin x$ $- \int u  dv = uv - \int v  du$	
$ \begin{array}{lll}                                   $	
$-4) \int x \cos x  dx$ $= \int x \cos x  dx$ $= \int x + \int x  dx = \cos x$ $= \int x + \int x  dx = \int x + \int x  dx$ $= \int x \sin x  dx$ $= \int x \sin x  dx$	
$ \begin{array}{lll}                                   $	
$-4) \int x \cos x  dx$ $= \int x \cos x  dx$ $= \int x + \int x  dx = \cos x$ $= \int x + \int x  dx = \int x + \int x  dx$ $= \int x \sin x  dx$ $= \int x \sin x  dx$	
$-4) \int x \cos x  dx$ $= \int x \sin x  dx$	
$-4) \int x \cos x  dx$ $= \int x \sin x  dx$	